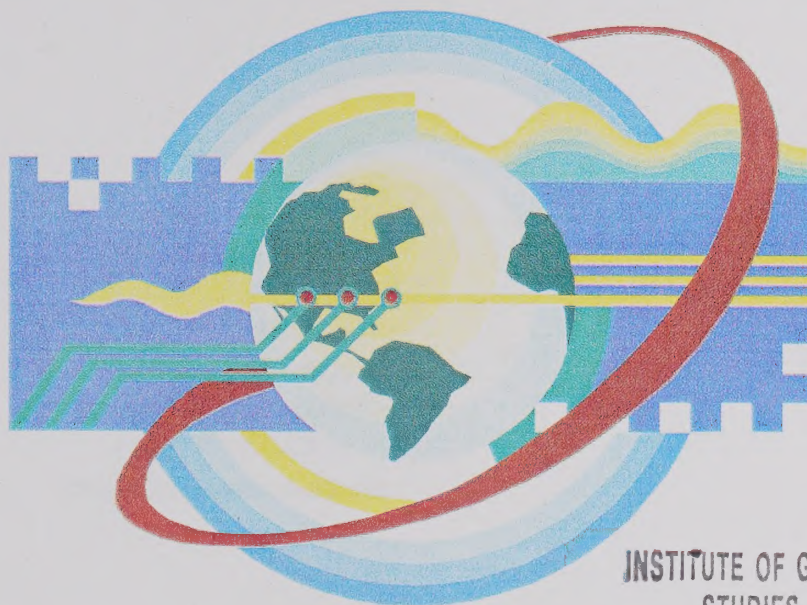


CITY OF GUSTINE GENERAL PLAN



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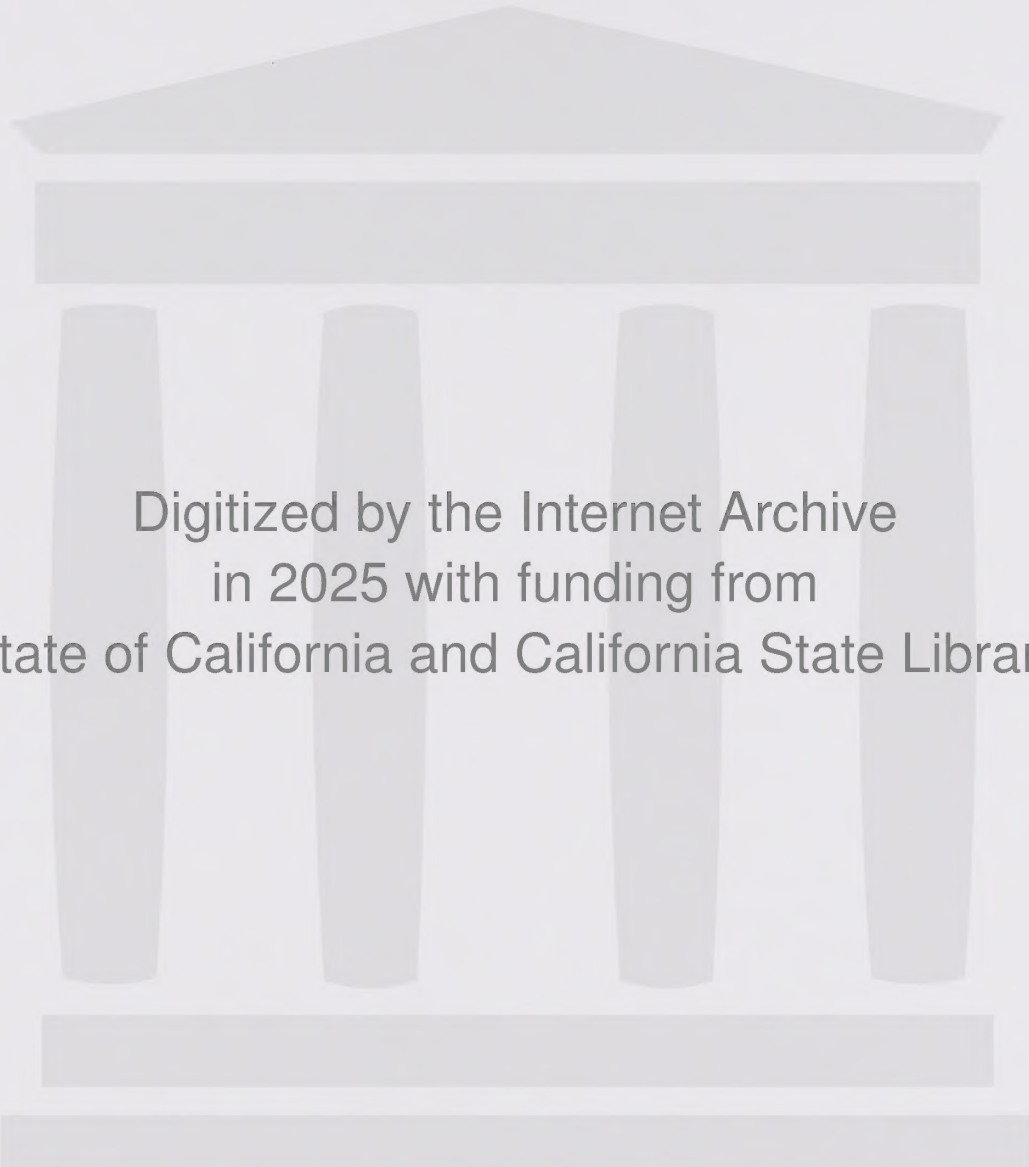
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AUGUST 2000



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City of Gustine

General Plan

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AUGUST 2000

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CHAPTER 1

ISSUES, OPPORTUNITIES & CONSTRAINTS





Introduction

This section is a summary of the issues that were identified at the public workshops. This portion of the report represents a concerted effort to involve the public in identifying issues, opportunities, and constraints in the decision making process of the General Plan Update.

Issues

The first step in this process is to identify the issues and concerns given by residents in the Gustine community. After three workshops, which included outreach with the planning commission, city council, chamber of commerce, and the general public, several repeating themes emerged.

A joint meeting of the City Council and Planning Commission was held where the following question was asked: *"The City of Gustine would function more efficiently and have a higher quality of living if the following concerns were addressed"*.

Among the issues and concerns identified:

- Revitalizing the downtown
 - Review of current codes for applicability
- Ability to attract grant money to fund public services
- Attracting various businesses including:
 - Industrial
 - Retail
 - Improved medical facilities
- Consistent funding to improve community/public services
- Attracting light industry to increase tax base and creating new jobs
- Active parks and recreation program
- Transportation services
- Increase new housing market
- Controlled growth
- School sites
- Safe sidewalks

Revitalizing the Downtown Area

The most reoccurring theme was revitalizing the downtown area. Within this concept, there are a number of issues that were identified that include the high rents within the downtown area, enforcement of the zoning code to enhance the area and an increase of the current building standards in an effort to enhance the area. Revitalizing downtown area adds a lot of hype to "what Gustine can be", if only it had a thriving downtown.

It was also mentioned that Gustine's proximity to the interstate, state highways, and the national cemetery should be promoted as a marketing tool to attract visitors.

Retail Services

The lack of everyday conveniences such as adequate retail stores, medical and dental facilities, recreation facilities, and restaurants is viewed as a disadvantage for the community. These are services that are associated with more urban areas. However, it was also noted that the small town atmosphere and the "quaintness" of Gustine add to its appeal.



Issues, Opportunities and Constraints

Growth and Public Services

There was considerable discussion regarding the impact of additional facilities to enhance the community and the costs associated with new infrastructure.

Increased growth places a burden on public agencies to keep pace with new service demands and maintaining past service levels.

Agriculture

Agriculture is an integral part of the community's identity, its economic base, and its heritage. Agricultural use is the desirable and viable land use within the community.

While agriculture remains a major industry within the Gustine community, the ability to attract new industries has also been identified as an opportunity. Citizens envision that with new industry more jobs would result and thus, more money for community services.

Opportunities

Participants at the workshops view Gustine as a city with a lot of potential, "if only it could overcome a few obstacles." It appears that there are concerns over where the city "should go" relative to what types of businesses the City would like to attract.

Among the opportunities identified are:

- Proximity to state highways
- Proximity to the National Cemetery
- Proximity to national wildlife refuges
- Quaint history
- Attracting light industry
- Proximity to the Bay Area
- Gateway to Silicon Valley
- Relaxed lifestyle
- Safe place to live
- Gustine as an emerging technology hub

Prime Proximity

Gustine's location is ideal for attracting tourists. The direction the city wants to take, however, is dependent on the overall vision of the community. Tourism can lead to local spending within local businesses, but tourist related amenities must be present, such as hotels, sidewalks, and attractions.

Attracting tourists can lead to increased retail services and increased local spending, however, more maintenance dollars must go into the local infrastructure system such as the road system. This will be important in the future as the City decides which direction to take.

In addition to attracting tourists, Gustine's location could also be ideal for attracting potential residents who work in the Silicon Valley; thus Gustine could be a "bedroom community". Infrastructure concerns may be addressed if this is the direction the City decides to take as technology increases.



The idea of Gustine becoming a technology hub was also discussed at a workshop. Technology will be playing a more important role in society, and some citizens felt that Gustine could have an opportunity to attract that type of industry.

Constraints

Constraints for the City were also identified. Among those identified:

- Lack of zoning enforcement
- Appearance of properties along the highway
- Clean up of Main Street buildings
- Attractions for young people

Code Enforcement

Residents expressed great concern that the codes needed to be either stricter or enforced in an effort to “clean up” Gustine. There were concerns that in an effort to attract visitors to Gustine, the downtown area needed to be enhanced.

The lack of caretaking for properties along the major corridors coming into Gustine also had residents concerned that “newcomers” would get a bad impression of Gustine.

Recreation

Residents listed recreation activities as a major factor affecting the quality of life. Recreational use policies in public areas may need to be considered and evaluated to accommodate the needs of the local residents, specifically targeting the youth of the community.

Figure IOC-1 is a summary of issues, opportunities, and constraints that were identified through the public process.

Challenges

As Gustine grows and addresses community concerns the ability of the City to provide for the social needs of residents will need to be addressed. There is also a critical need to provide or attract sustainable employment opportunities.

Employment opportunities must be balanced between government, retail, and other sector opportunities to insure long term economic vitality for the community.

Increased growth, types of employment, and wages need to be considered to balance the housing choices.

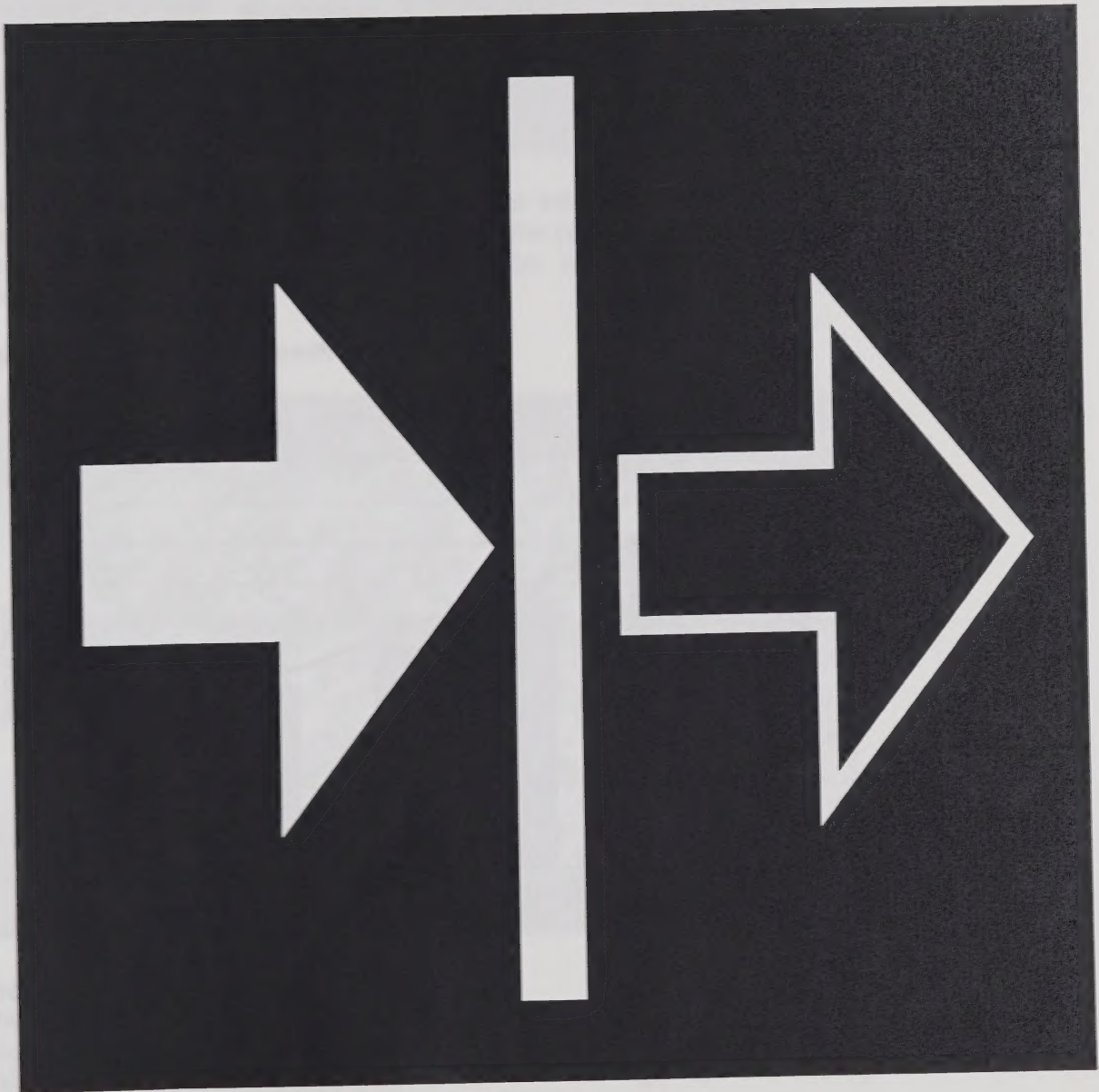
It is important to note here, however, that there is not a clear view regarding what types of business opportunities that the City should seek to attract. Residents seem to want employment opportunities, retail services, and tourists to come to the area; however, they would also like to explore light industry to increase the tax base.

Issues, Opportunities and Constraints

While the ideas expressed at the workshops would impact the current style of living, it will be important for the City to identify its direction as infrastructure and other needs will need to be accommodated to make Gustine an attraction.

CHAPTER 2

EXISTING CONDITIONS





Existing Conditions

Introduction

This section contains information for the framework of the Gustine General Plan. This section identifies existing conditions for each of the required General Plan Elements and trends within Gustine.

Determinants of Change

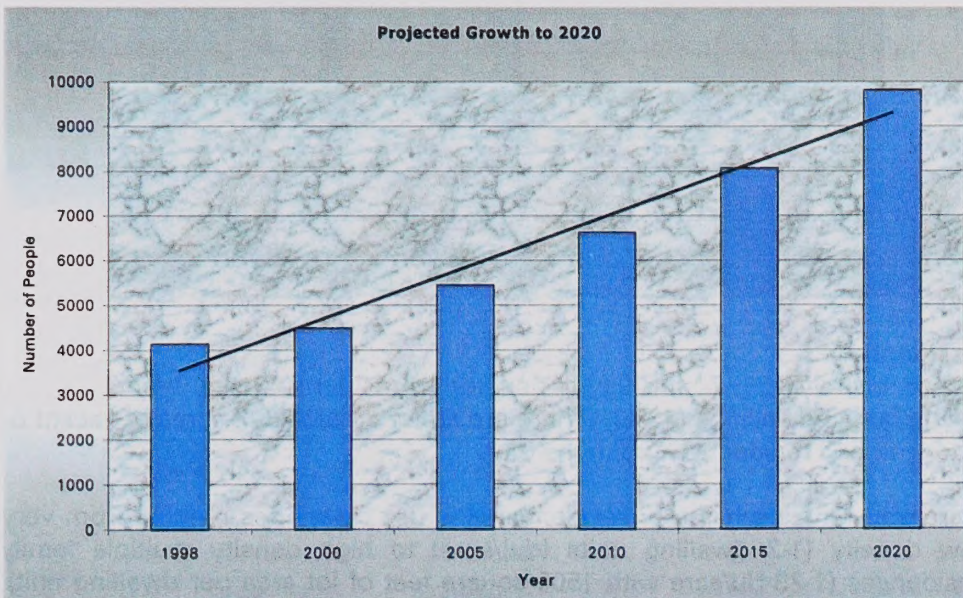
Table EC-1 shows population changes since 1970 to the present. From 1990 until 1998, the City of Gustine experienced a 5% increase in growth.

Table EC-1: Historic Growth Changes

Year	Population	% Change	Growth Rates
1970	2793	-	-
1980	3142	11%	1.18%
1990	3931	20%	2.27%
1995	4135	5%	1.02%
1998	4140	0%	0.04%

The City Council has assumed a growth rate of 4% which will be used in all population projections. Figure EC-1 illustrates the possible growth scenario in Gustine to 2020. Data for this methodology came from the California Department of Finance.

Figure EC-1: Projected Growth to 2020



Location and Boundaries

The *existing* city boundaries of Gustine cover an area of 1003.06 acres. Located on the western side of Merced County in California's San Joaquin Valley, Gustine is situated at the crossroads of State Highways 140 and 33. Gustine's regional location is shown on Map EC-1



Land Use

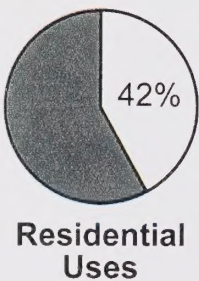
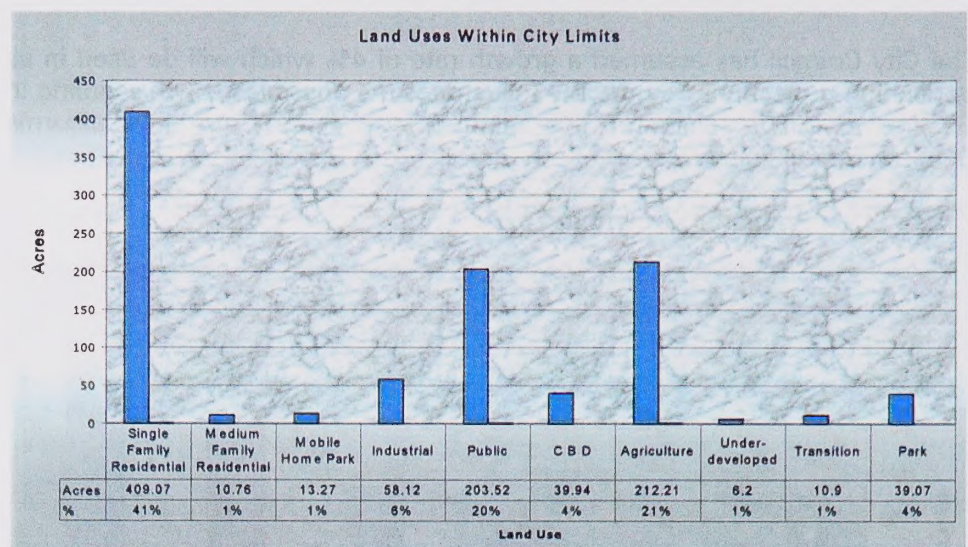
Land use is the principal focus of the General Plan. This section identifies existing land uses within Gustine's city limits and proposed Sphere of Influence (SOI).

Map EC-2 illustrates existing land uses within Gustine's city limits, SUDP, and proposed SOI. It is important to note that the land uses are existing, versus what is in the 1992 General Plan planned uses.

The corporate area of the City of Gustine comprises approximately one square mile (640 acres), with an additional 550 acres proposed for urban reserve designations within the City's SOI boundary.

Figure EC-2 illustrates the percentage of land uses within Gustine's city limits.

Figure EC-2: Land Uses Within City Limits



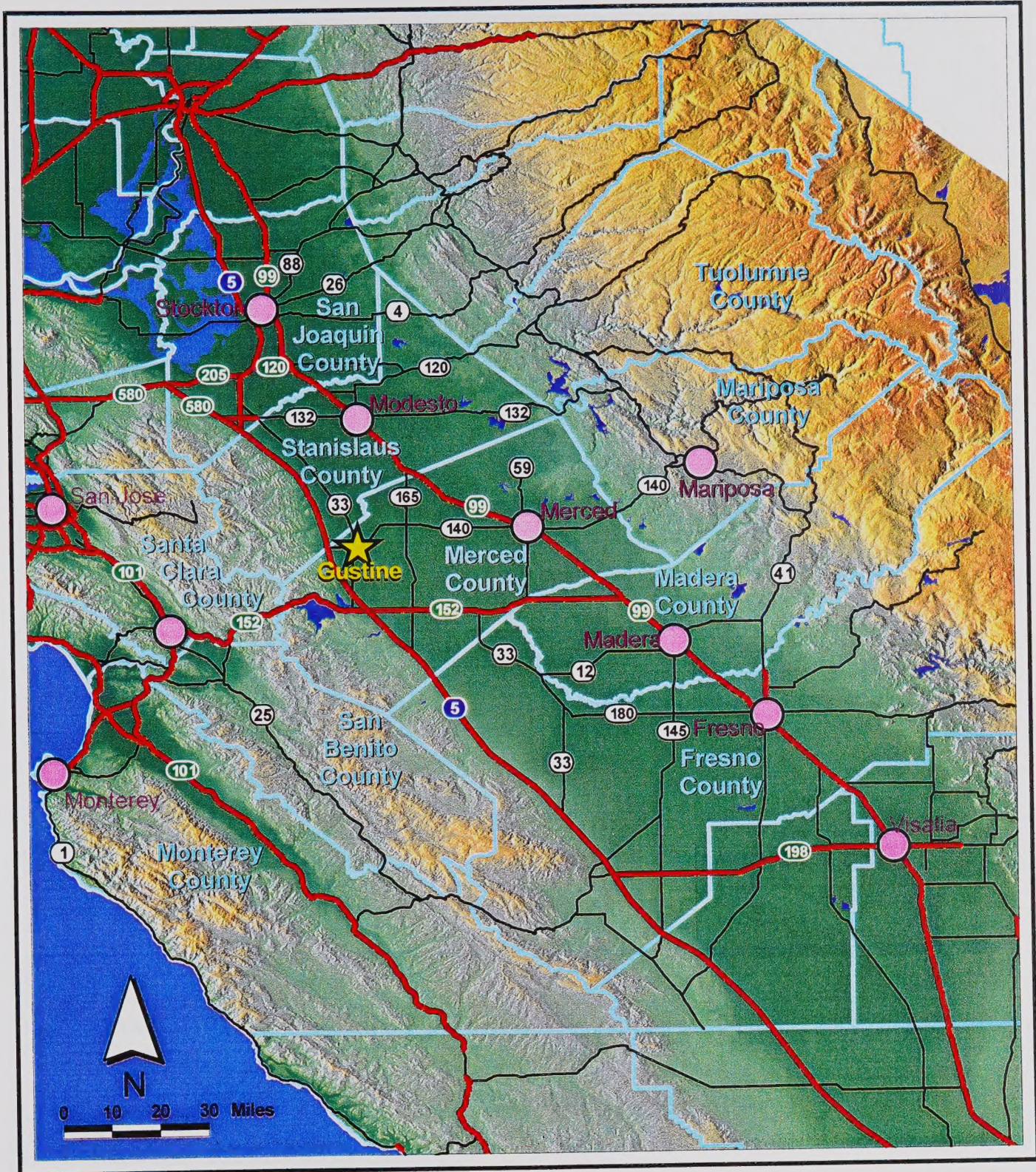
Residential

Approximately 42% of the City is devoted to residential uses, predominantly single family dwellings (41%). There are approximately 6.2 acres of vacant or undeveloped residential land in the City.

Currently, Gustine has four residential land use categories ranging from very low density (1-2 dwelling units (du)/acre) to high density multiple family residences (1-23 du/acre with 1500 square feet of lot area per dwelling unit). Gustine also has a Residential-Professional District land use which could accommodate as many as 69 gross/gross acre. This district could conceivably host land uses such as multiple family units, hotels and motels, restaurants and bars, community facilities, and offices. Although land is designated for high density, much of this land has been developed in single family uses.



Map EC-1: Regional Location

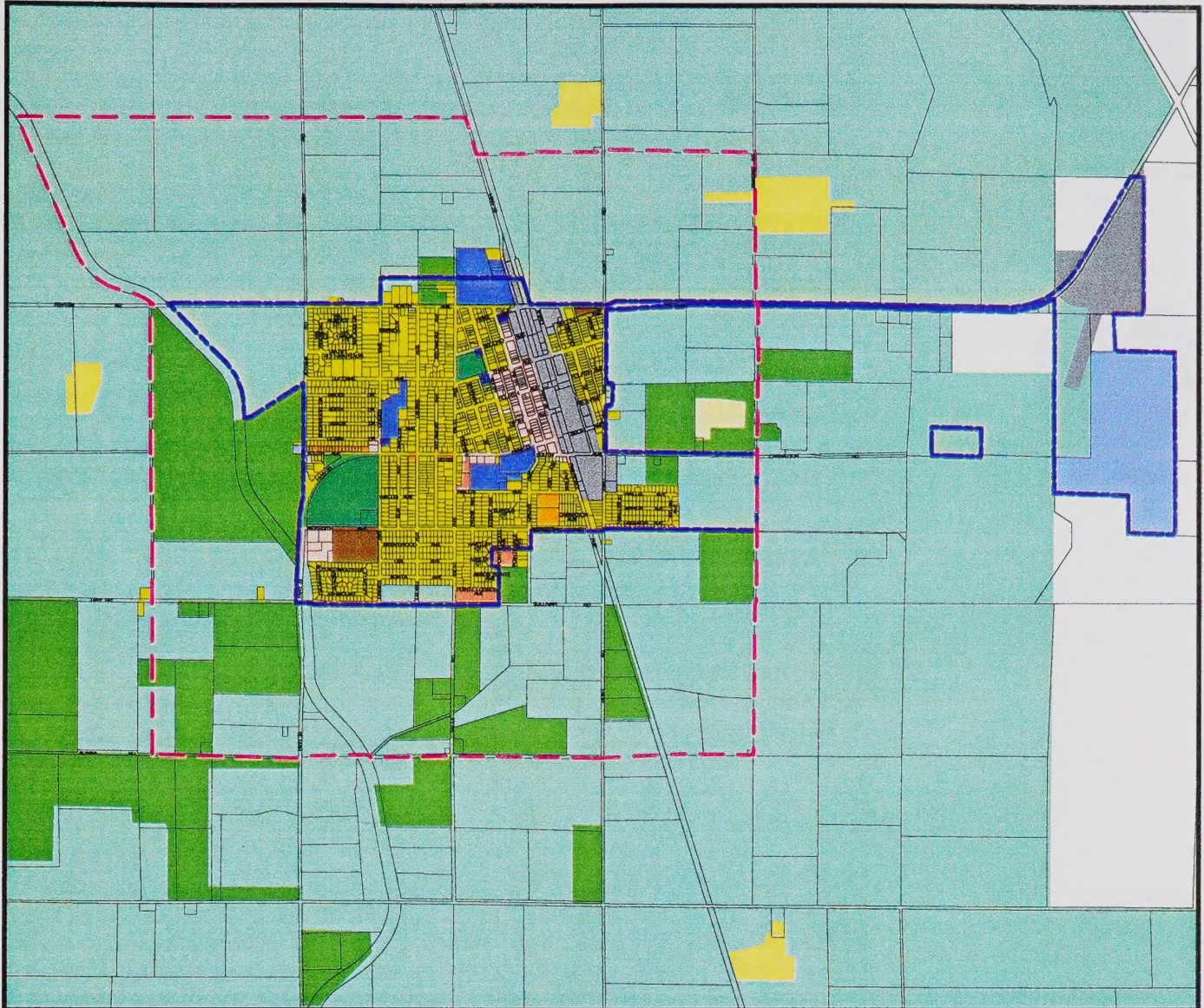




Existing Conditions



Map EC-2: Existing Land Uses



- Single Family Residential
- Multi-Family Residential
- Mobile Home Parks
- Industrial
- Utilities
- Commercial
- Park
- Public Use
- School

- Grain, Seed, Row Crops
- Orchards, Vineyards
- Dairy and Livestock
- Poultry
- Rangeland
- Land in Transition
- Sphere of Influence
- City Limits



0 1000 2000 3000

Scale in Feet
July 17, 2000



Existing Conditions

Existing Conditions

Commercial

The City's major retail commercial area is its Retail Business District (RBD) along Fifth Street between Second and Sixth Avenues. Existing commercial land accounts for about 39.94 acres or 4% of the corporate area.

The existing commercial land use designations include Retail Business District, Neighborhood Commercial District, General Service Commercial District, and Highway Commercial District.

Industrial

Industrial land accounts for over 58 acres or 6% of the corporate land area. There are two Industrial land use designations. The Controlled Industrial District is designated for restricted non-intensive uses and the Manufacturing District provides for a full range of manufacturing activities.

Other Land Uses

The existing General Plan designates land for Public Use, Open Space, and Planned Community Development. Public land means land designated for schools, public utilities, parks, wastewater treatment plants, airports and similar uses.

Open space uses include agricultural land and outdoor recreation. Planned community designations may be assigned to residential, commercial or industrial land uses and are intended to give the City flexibility and control in specific site planning and development.

Gustine formerly used a solid waste disposal site located approximately 1/2 mile east of Kniebes Road on Carnation Road. The site consists of about 10 acres and has been abandoned; the city's solid waste is now disposed of at Merced County's Billy Wright landfill.

Circulation

The Circulation Element identifies conditions that provide for the circulation of people, goods, energy, water, sewage, storm drainage, and communications to serve the anticipated land use activities throughout the City. Circulation issues have a direct relationship to other chapters of the General Plan including Land Use, Housing, Open Space, Noise and Safety.

The Circulation Element is divided into three sections that discuss vehicular transportation and roads, alternative modes of transportation (public transit, rail, air, and bicycle routes), and other infrastructure issues (water, sewer, power, irrigation and storm drainage facilities).



Circulation Element

- ☐ Vehicular
- ☐ Alternative
- ☐ Other Infrastructure



Streets and Roads

Automobile and truck transportation are the primary sources for moving people and commodities in and through the City of Gustine. The roads in the Gustine Planning Area serve different purposes for various land uses.

Local roads in residential neighborhoods provide low volume routes for residents to gain access to retail shopping centers and other activities whereas major streets are used to distribute products (truck traffic), and to provide high volume routes for employees to access industrial and commercial areas.

The City of Gustine uses a functional road classification system together with its General Plan land uses to make up its Circulation Plan. The design characteristic of different roads and their relationship to one another is based upon their capacity to serve the functions of access and movement. Map EC-3 illustrates the circulation system in terms of functional classification, level of service, and current traffic count data.

The City of Gustine supports and participates in the development of the Merced County Regional Transportation Plan (RTP) and its policies and programs. The RTP is divided into two areas. One identifies local projects the City will undertake during the next seven years provided money is made available through Local Transportation Funds (SB380) or other local funding options. The second is a long-range plan that identifies road maintenance and repair over the next twenty years.

Gustine's current traffic volumes are within the carrying capacity of the City's streets. However the maintenance condition of many streets is less than adequate; and, funding for paving has been an issue in Gustine.

Alternative Transportation Modes

Alternative Transportation Modes available to residents in Gustine include inter-city transit, airplane, bicycle, and pedestrian uses.

Transit in Merced County is a regional service providing access from each of the cities in Merced County as well as service in rural areas.

Currently there are two fixed routes and four dial-a-ride (DAR) vehicles providing service to the west side of Merced County.

Route 10 Leaves the City of Merced at 7:00 am on its way to Los Banos, and arrives at 7:50 a.m. At 7:55 am. The Bus starts back from Los Banos to Merced and arrives in the City of Merced at 9:30 am. There are only two runs a day with the second service leaving the City of Merced at 3:30 p.m. and arriving in Los Banos at 5:00 p.m. The bus returns to Merced at 5:50 p.m.



Fifth Avenue,
Gustine's Retail Business District

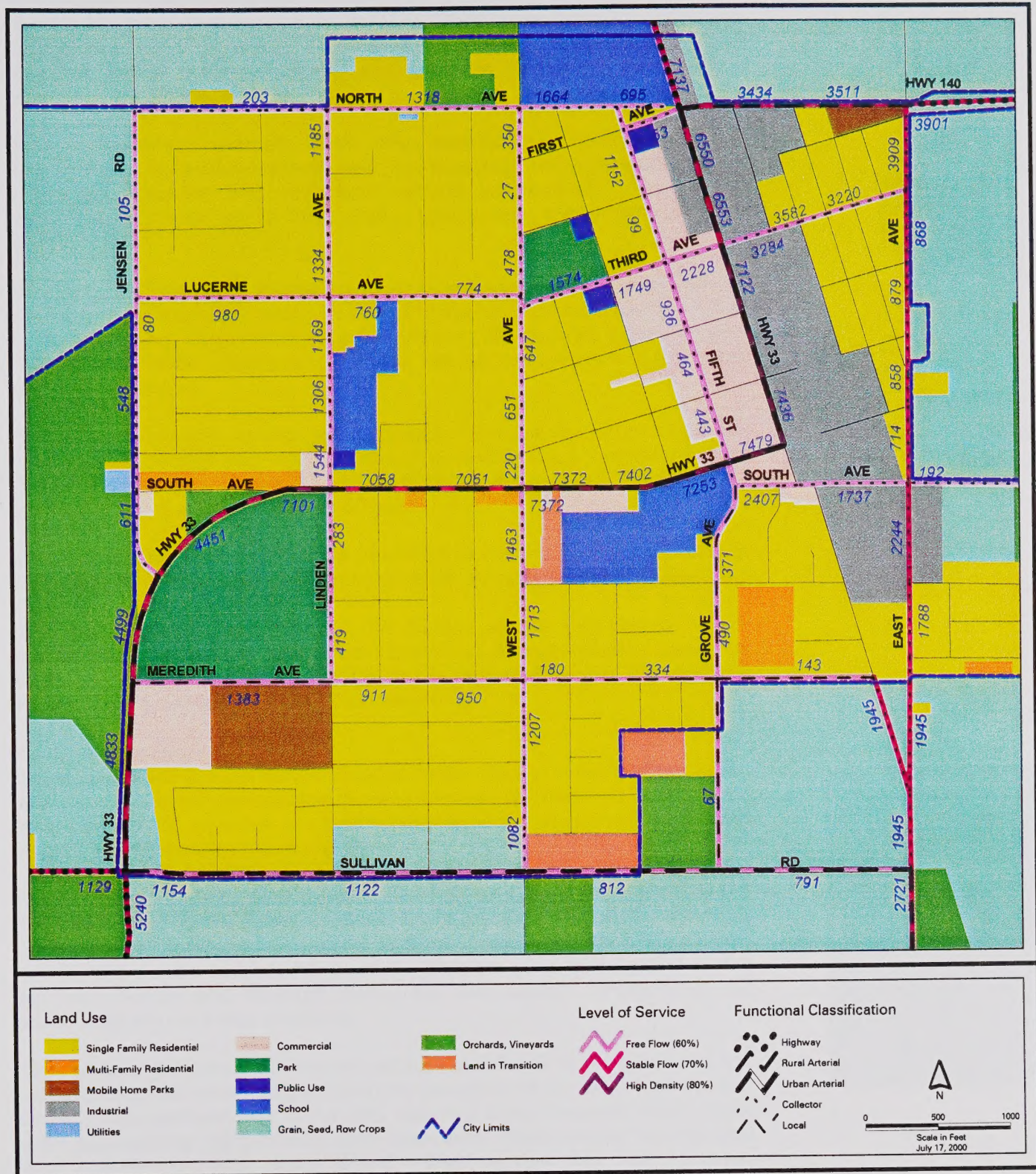


Highway 33/140

Existing Conditions



MAP EC-3: Circulation System





Existing Conditions



Existing Conditions

The DAR service is strictly a demand-response system that provides rides to the general public, but with priority give to senior citizens and the physically challenged. There is one bus in Dos Palos, 2 buses in Los Banos, and one Bus for Newman, Gustine, and Santa Nella. Both buses from Dos Palos and Gustine go into Los Banos; it should be noted that the Stanislaus Area Regional Transit system (START) also provides service to the Gustine, Newman, and Patterson areas.

Transit providers in Merced County have developed a typical transit user profile which consists of elderly and handicapped, individuals on income assistance, students, and individuals without automobiles. The largest percentage of these are students (29%), elderly (9%) and income assisted (4%).

Bicycling and walking continue to grow in popularity due to their health benefits and recreational value. For some, these sources are their only mode of transportation. Currently there are a little over 200 bicycles registered with the Gustine Police Department. There are no predominant bike routes identified in Gustine.

The Gustine Airport is located approximately 1.5 miles east of the main city area, adjacent to Highway 140. The airport is classified as a General Aviation, Basic Utility Airport by the Federal Aviation Administration. The runway length is 3,200 feet and its width is 50 feet.

Agricultural spraying operators are permitted to use the facility and account for much of the traffic. The nearest commercial aviation service is in Merced.

The Gustine Airport is served by the Gustine Airport Commission which makes recommendations to the City Council on Airport matters. Land use regulation around airports in the County is regulated by the City and the Merced County Airport Land Use Commission.

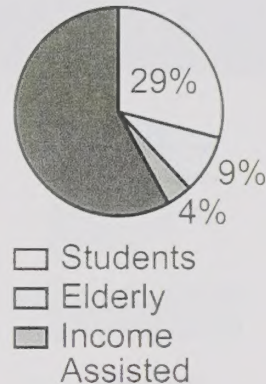
Other Infrastructure

There is an electric substation in Gustine, major (60 KV) electric transmission lines, and a natural gas mainline running through the planning area. These transmission and pipelines run parallel with existing transportation corridors minimizing the effects on land use activities.

Gustine has one major Central California Irrigation District canal just west of the City Limits; the CCID Main Canal. There are also two smaller canals; a community ditch which runs parallel to North Avenue and the CCID pipeline which runs parallel to Meredith Avenue. Both are used for irrigation during summer months and drainage during the wet season. Portions of the community ditch are also pipelined.

Groundwater is treated with a small amount of chloride at the well head and water quality has remained good with the exception of nitrates. Well number three, in the northern part of the city, was shut down because nitrate levels were approaching the minimum State standards. Well number two has also experienced increasing nitrate levels. Well number four was rendered virtually inoperable with the collapse of its clay walls.

Modeling which segments of the existing water distribution system need



Transit User Profile





improvement and where new lines will be required for future development has been done. Currently, the WWTP is being expanded and is expected to be completed in December of 1999. Once complete, the system will be able to handle 1.5 million gallons/day.

The relatively flat topography of Gustine inhibits storm drainage, which subsequently constrains community growth. The philosophy of the design was to grade streets to drain toward the lowlands to the east through pipelines and canals. To the north of North Avenue there is an absence of an adequate drainage system. The community ditch in use to transport drainage runoff to the east was designed for irrigation purposes and grows smaller to the east. This is a limiting factor in its adequacy for drainage use.

Housing

Local governments are required to adopt and periodically update the Housing Element of their General Plan as stated in California Government Code Section 65302(c). The guidelines and requirements for Housing Elements are outlined by the California Department of Housing and Community Development (HCD).

The Housing Element is integrated with the General Plan and recommends land use and development controls consistent with the Land Use and Circulation elements.

The Gustine Housing Element has considered the city's fiscal and environmental characteristics in determining the extent to which it is able to participate in the regional housing need. Given the financing available, price of land and cost of construction, this element endeavors to plan cooperatively with other local governments.

Households

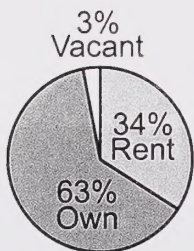
Like many smaller communities throughout California, Gustine lacks the resources to continuously keep an inventory of its existing housing stock. Furthermore, the only available date is from the most recent Census, unless an inventory, paid for by the City, has been completed.

At the time of the 1990 Census, there were 3,931 people living within the Gustine City limits. There were also 1,523 occupied housing units (households) and 60 vacant houses. Gustine is comprised of approximately 63% owner occupied units, 34% renter occupied units and has a 3% vacancy rate. The summer rental vacancy rate is generally less than 1% because of the migrant farm worker influx to Gustine.

Cost of Housing vs. Ability to Pay

In 1990, the City's median home value was \$94,500. The median contract rent was \$303 per month. According to the 1990 Census, over 266 (49%) of the renter households in Gustine paid 25% or more of their gross income for rent and of those, 258 (49%) had household incomes of less than \$20,000. There were 263 (30%) owner households that had selected monthly payments greater than 25% of their income and of these, 93 (11%) earned less than \$20,000.

In June 1991 the sale price of homes ranged from \$60,000 to \$160,000. The median sale price for a 1,500 square foot three bedroom, two bath home was



Households



Existing Conditions

approximately \$112,000. Lower priced homes were small, probably one bedroom, which sold for an average price of \$66,000. Local realtors observed an increase in the price of lower priced homes, and a steady price for moderate homes during 1998. Homes under \$130,000 sell well, while higher priced homes (some advertised as high as \$230,000) stay on the market for a greater length of time. Although these homes seem moderately priced compared to other urban areas, providing affordable home ownership for moderate income families in Merced County is a challenge.

Mobile homes provide a more affordable means of home ownership for some residents. A new single-wide mobile home (14'x 60') costs between \$25,000 and \$40,000 depending on amenities, while used mobile homes range between \$2,500 and \$40,000.

There is presently only one mobile home park in the City which is for seniors and has a total of 100 spaces. There are 18 other mobile homes in the City, most of which are in the vicinity of the Beatrice Cheese factory along Highway 140, east of the downtown area.

Household income is a critical factor in determining the type and condition of housing in which people live. According to the 1990 Census, the Gustine median per capita income was \$14,303 per year, compared to \$10,606 for Merced County and \$16,409 for the State of California.

Tables EC-2 and EC-3 illustrate the gross rent and house payments as a percent of income.

Table EC-2: Number of Renter Households by Gross Rent as a Percent of Income

Rent as % of Income	<10,000	10,000-19,999	20,000-34,999	35,000-49,999	50,000 or more	Total
0-19%	0	12	60	104	19	195
20-24%	0	11	30	10	6	57
25-29%	21	10	4	4	0	39
30-34%	18	43	0	0	0	61
35+%	90	76	0	0	0	166
Not computed	0	14	0	0	0	14

Source: 1990 US Census

Table EC-3: Number of Owner Households by Home Ownership Costs as a Percent of Income

Owner Costs as % of income	< 10,000	10,000-19,999	20,000-34,999	35,000-49,999	50,000 or more	Total
0 -19%	17	66	141	114	131	469
20-24%	15	21	28	37	38	139
25-29%	8	13	21	47	9	98
30-34%	0	0	17	14	11	42
35+%	33	39	30	13	8	123

Source: 1990 US Census

Permit Activity

From 1990 to the present, the largest number of new residential permits were issued on the south side of the city off of Sullivan Road. Other new permits



Gustine

\$14,303

Merced County

\$10,606

State of California

\$16,409

**Median
Per Capita
Income**



were obtained throughout the city, but are not concentrated in one particular location. Map EC-4 shows permit activity for 1998.

Rental Activity

Rents within the city vary depending upon the type, age, location, and amenities of the units. Rents range from under \$100 a month to more than \$750 a month, the median being \$303 a month (1990 Census). Rents for one and two bedroom duplexes and apartments now range from \$275 to \$365 per month. The typical two bedroom apartment rents for \$360 per month. Rents for two and three bedroom houses range from \$500 to \$800 per month. Meredith Manor, built in 1985, is a 40-unit complex with subsidized rents for low income families.

According to the California Housing Partnership Corporation's 1991 "Inventory of Federally Subsidized Low-Income Rental Units at Risk of Conversion", the City had no "at risk" units during the 1992 planning period. There are also no locally-subsidized units at-risk, as the City has not issued mortgage revenue bonds, has not approved any density bonuses with financial assistance, does not have an in-lieu fee program, and has not assisted multifamily housing with redevelopment or CDBG funds.

It appears, however, that Gustine Gardens will be at risk of conversion in the year 2000 and Meredith Manor in the year 2008, when their twenty year agreements with Farmer's Home expire. In order to retain these units as low income, the City will pursue a cooperative agreement with the Merced County Housing Authority to acquire and manage these housing developments.

Housing Condition and Overcrowding

In 1993, a housing survey was done in Gustine. Among the issues addressed were housing condition and overcrowding. Table EC-4 summarizes the number of units in 1993 in need of repair.

Table EC-4: 1993 Housing Conditions

	Single Family	Multi- Family	Mobile Units	Total
Number of Units in Area	1270	177	115	1562
Number of units in need of rehabilitation	414	52	15	481
% of units in need of rehabilitation	33%	29%	13%	31%
Number of units surveyed	156			

Source: 1993 Self Help Survey

Of those surveyed, a further breakdown was done showing the degree to which homes were in need of repair. Of the 156 surveyed, 51% were in need of moderate repairs and 36% were in need of substantial repairs.



MAP EC-4: Permit Activity





Existing Conditions

Existing Conditions



Table EC-5 shows the breakdown of the survey.

Table EC-5: 1993: Breakdown of Units Classified as in Need of Rehabilitation

	Number of Units	% of Units Surveyed
Minor	18	12%
Moderate	80	51%
Substantial	56	36%
Dilapidated	2	1%
Total	156	100.0

Source: 1993 Self Help Survey

The 1990 U.S. Census indicated that 120 households in Gustine were defined as overcrowded. Of these, 92 (77%) were renter households and 28 (23%) were owner occupied households.

The U.S. Census Bureau defines overcrowding as more than one person per room, not including the kitchen and bathroom. Overcrowding may be a more significant problem than statistically indicated, especially during the summer months when an influx of seasonal and farm workers arrive.

Housing Stock Conditions

Housing stock conditions in Gustine are generally good due to active abatement and code enforcement. Many of the City's older houses are also located in stable neighborhoods and are maintained.

Older housing stock can become an important source of housing for low and moderate income people as these houses "filter down" in price. Unfortunately, many older "filter down" units require substantial maintenance and repair that sometimes adds to the "affordability gap" for moderate income households.

Public Facilities and Services

The City's engineer and a consulting engineer completed three studies in 1990, which more specifically defined local water and wastewater system needs. The City Council has used the results of these studies to determine hook-up fees and water and sewer rates, the money from which will be used to make system improvements.

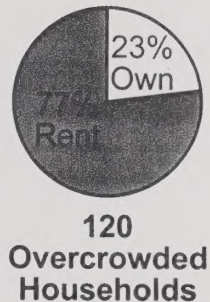
One deficiency that has not yet been comprehensively analyzed or funded for improvement is the city's storm drainage system. It is estimated that within three years, a revised storm drainage plan will need to be completed. This will become a priority during the next two years and before significant development takes place in northern Gustine.

Public Protection

Gustine currently has a 25 member volunteer Fire Department and it also contracts with the County for fire services. The City's Police Department provides adequate service with 6 full time officers, and full time dispatching.

Special Needs

Residents with special needs in the City of Gustine include the elderly, large families, disabled people, families with a single parent head of household,





farm workers, and the homeless.

Currently there is no working relationship between the City and the Merced County Housing Authority. However, there are some low-income residential areas managed by Professional Apartment Management (PAM) of San Joaquin County, in which residents must meet FMHA low income criteria. PAM believes there is a need for additional low income housing, since they do have a waiting list.

Households in the City of Gustine that appear to have the most critical needs are the elderly and single parent headed households. Both groups are sizable percentages of the residents in Gustine with very low incomes, coupled with the need for unique housing, such as larger living units for single parent headed families or accessible community environments for the elderly. These factors sometimes make adequate housing for the two groups difficult. Large family, farm worker, and disabled person households also have special needs.

Elderly

The elderly group in Gustine experienced above average growth between 1980 and 1990. This group grew by 38% compared to the 25% growth for the entire population during the ten year period. In 1990, 541 (36%) of the City's 1523 households consisted of residents 65 years or older. Of these, 108 elderly householders rented homes.

Gustine Garden Apartments, a 35 unit senior citizen housing development was built in 1982 by private enterprise with the use of a 515 Federal loan through Farmer's Home Administration. These duplexes, designed for the elderly are a tremendous asset to the City and there will be an increasing demand for more of these types of units in the future.

It is interesting to note that there are a significant number of people in Gustine who live alone. Of the 378 men and women who live alone, according to the 1990 US Census, 232 or 61% are over the age of 65.

This indicates that there is, or will soon be, a demand for a convalescent facility, more retirement oriented residential communities or both. The City can entertain proposals for these in any medium to high-density residential district using a Planned Community overlay zone. The smaller six person in-home care facilities can be located in any residential district.

Single Parent Head of Household

Single parent heads of households families comprised 12.5% of all households in Gustine in 1990, with 143 households (9.4%) headed by females and 47 households (3.1%) headed by males. In 1990, 96 of the children who lived in single family female head of households lived below poverty level (70% of all children in single female headed households), while all children living with single male headed households lived above the poverty level. Most of the children living below poverty level were under age six.

Thirteen percent of children under six living with a single mother had mothers who worked, while 70% of children between six and 17 living with a single mother had moms who worked.



Existing Conditions

As in much of the surrounding area, single-headed families with children are one of the groups most in need of public assistance. The status of such families has planning implications for housing, childcare, recreation programs, schools, and other social services. Gustine recognizes the need for these families to have affordable rental housing, often with three or more bedrooms.

Farm Workers

During the summer and early fall, there is a large migrant farm worker population in Gustine. The size and needs of this group are difficult to gauge because of its transient nature and the fact that some of these workers are undocumented aliens.

The availability of housing for farm laborers is impacted by the influx of better paid packing shed workers who compete for short-term housing. What often happens is that farm laborers "double up" or live in "non-housing" units. This make-do type of farm worker housing is detrimental to the neighborhoods where it takes place and points to a need for adequate seasonal housing.

The 1991 "Merced County Housing Needs Determination" estimates that 280 assisted housing units are currently needed countywide, assuming that farm workers needs are equal to their proportion of the labor force.

Merced County currently has three programs that are specifically directed towards farm worker housing. The FMHA 514 and 516 programs provide assistance to public or private non-profit organizations to develop farm labor housing. The State Housing and Community Development Farmworker Housing Grant Fund provides matching funds to the same organizations for new construction or rehabilitation of housing. The State Office of Migrant Services operates two migrant farm worker housing centers in the County, one of which is located on State Highway 165 north of Los Banos.

Homeless

Gustine occasionally has homeless persons however, there is virtually no permanent group living on the street. The Police Department, in cooperation with the Salvation Army, work to find temporary lodging for destitute persons and families. Additional emergency housing and longer term support is provided by the County Social Services Department and local churches and service organizations.

Persons in Group Quarters

Group quarters refer to two types of living arrangements: a living situation where unrelated persons share kitchen and perhaps bath facilities such as a boarding house and the other situation applies to units in which people are cared for and includes facilities such as hospitals, convalescent homes, boarding schools, and prisons.

According to the 1990 U.S. Census there are currently no Gustine residents living in group quarters. This could change in the next five years as an aging population could be served by the development of a convalescent home.

Noise

The principal noise source in the City of Gustine is traffic on State Highways and industries. The existing noise environment in the City of Gustine was determined by a combination of noise level measurements and noise



modelling. Following is a discussion of the background noise level survey results, and a description of significant noise sources in the City.

Major Stationary Noise Sources

The production of noise is an inherent part of many industrial, commercial and agricultural processes, even when the best available noise control technology applied. Noise production within industrial or commercial facilities is controlled indirectly by Federal and State employee health and safety regulations (OSHA and Cal-OSHA), but exterior noise emissions from such operations have the potential to exceed locally acceptable standards at nearby noise-sensitive land uses.

The City and BBA selected stationary noise sources that were studied. Noise exposure information was developed from operational data obtained from source operators (when available) and noise level measurements conducted at reference locations around the noise source. Only existing noise levels are described since there are too many variables and unknown conditions to predict future noise exposure.

The following discussions provide generalized information concerning the relative noise impacts of each source, and identify specific noise sources which should be considered in the review of development proposals where potential noise conflicts could result. Not all industrial noise sources in the City are discussed. Unidentified industries or other major noise sources may exist, which could generate significant noise levels and result in noise-related land use conflicts.

Generalized 50 and 55 dBA hourly L_{eq} noise contours were prepared for major stationary noise sources where it was determined that such contours would be located off the property occupied by the source. These contours are included in Figure EC-5. The generalized contours contained within Figure EC-5 should be used as a screening device to determine when potential noise-related land use conflicts may occur, and when site-specific studies may be required to properly evaluate noise at a given noise-sensitive receiver location.

Beatrice Cheese:

This facility is located south of S.R. 33 between Second and Third Streets. The Beatrice plant processes cheese and cheese by-products. The major noise sources at the plant are cooling towers, pumps, fans, compressors and similar equipment. A residential area is located south and east of the plant. During the morning of February 12, 1999, sound level measurements were conducted at the southeast corner of Second Avenue and Second Street, which is about 120 feet from the plant's cooling tower. Sound levels at this location ranged from about 66-70 dBA, with an energy average (L_{eq}) of 68.8 dBA. Another measurement was conducted at Second Street and Fourth Avenue which is about 700 feet from the cooling tower. Sound levels at this location ranged from about 48-51 dBA, with an L_{eq} of 50.4 dBA.

Map EC-5: Noise Contours



This distance to the 50 and 55 dBA hourly L_{eq} contours are about 1,050 and 600 feet, respectively, using the standard assumption that sound from a point sources diminishes at the rate of 6 dB/doubling of distance. These contours are shown on Map EC-5.

Avoset Foods:

This food processing plant is located east of S.R. 33 and south of Fourth Avenue. Major noise sources at the plant are fans and refrigerated trucks. A residential area is located east of the plant. Sound level measurements were conducted during the morning of February 12, 1999 at Fifth Avenue and Second Street, which is about 150 feet from the fans on the east side of the building. Sound levels ranged from about 48-51 dBA, with an L_{eq} of 50.4 dBA.

The distance to the 50 and 55 dBA hourly L_{eq} contours are about 350 and 200 feet, respectively, using the standard assumption that sound diminishes from a point source at 6 dB/doubling of distance. These contours are shown on Map EC-5.

Traffic Noise Sources

Traffic noise exposure was calculated using the Federal Highway Administration Highway Traffic Noise Model (FHWA Model). The FHWA Model is the analytical method currently favored by most state and local agencies, including Caltrans, for highway traffic noise prediction.

The Model is based upon reference energy emission levels for automobiles, medium trucks, (2 axles) and heavy trucks (3 or more axles), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site.

The FHWA Model was developed to predict hourly leg values for free-flowing traffic conditions, and is generally considered to be accurate with ± 1.5 dB. The Model assumes a clear view of traffic with no shielding at the receiver location. To predict L_{dn} values, it is necessary to determine the hourly distribution of traffic for a typical day and adjust the traffic volume input data to yield an equivalent hourly traffic volume. The Calvenno traffic noise emission curves were used as recommended by Caltrans to more accurately calculate noise levels generated by California traffic.

Traffic conditions for existing conditions (1998) that were used in FHWA Model were provided by the Merced County Association of Governments (MCAG). Appendix A lists traffic modelling input data, existing traffic noise levels calculated at locations representing the assumed distance to the nearest residences, and the distance to noise contours. Figure EC-4 shows the distances to noise contours from roadway centers.

In general, existing traffic noise levels on State Highways through Gustine range from about 61-65 dB L_{dn} at the nearest receivers on most roadways. Traffic noise levels that are 60-65 dB L_{dn} usually are considered to be fully compatible with noise-sensitive uses, which include residences, schools, churches and hospitals. Levels between 65 and 75 dB L_{dn} are marginally acceptable, and usually can be mitigated to acceptable levels. Levels over 75 dB L_{dn} are usually unacceptable, and it may not be feasible to reduce such levels to acceptable values.



Safety

There are wide ranges of environmental hazards that must be taken into account when planning for urban development. In most cases, proper planning can reduce threats to human safety and also the economic and social disruption resulting from natural hazards. The Safety Element identifies safety hazards in an effort to protect Gustine residents from unreasonable risks and reduce the impacts of natural hazards to the community. This section inventories and assesses the major hazards in the Gustine planning area including seismic activity and its related effects, flooding, fires, the storage and transport of hazardous materials and crime. The Safety Element also identifies emergency evacuation routes, their minimum road widths, and peakload water supply requirements in relation to the various safety hazards.

Earthquakes

The nearest faults of major historical significance are the San Andreas to the west of Merced County, a distance of approximately 40 miles from Gustine; the Hayward and Calaveras faults to the northwest; the White Wolf, Garlock, and Sierra Nevada faults to the south, and the Bear Mountain Fault Zone about 40 miles to the northeast of Gustine. These faults have been, and will continue to be, the principal source of seismic activity affecting the County of Merced, see Map EC-6.

The "Ortogonalita" is the only known fault inside Merced County, also known as the "Telsa-Ortogonalita Fault" This fault bisects the Coastal Range approximately 10 miles from Gustine but historically has not been active.

Gustine has never been an earthquake epicenter, however earthquakes originating elsewhere have shaken the city. There is documented evidence of seven earthquakes that shook the area in 1872, 1906, 1952, 1966, 1979, 1984, and 1989 and there may have been others that were not documented.

In the past no loss of life, serious injury, or major damage has occurred in Gustine due to earthquakes. However, if an earthquake epicenter was in or near Gustine, the city's downtown would be destroyed much like Coalinga in 1982.

Liquefaction & Tectonic Subsidence

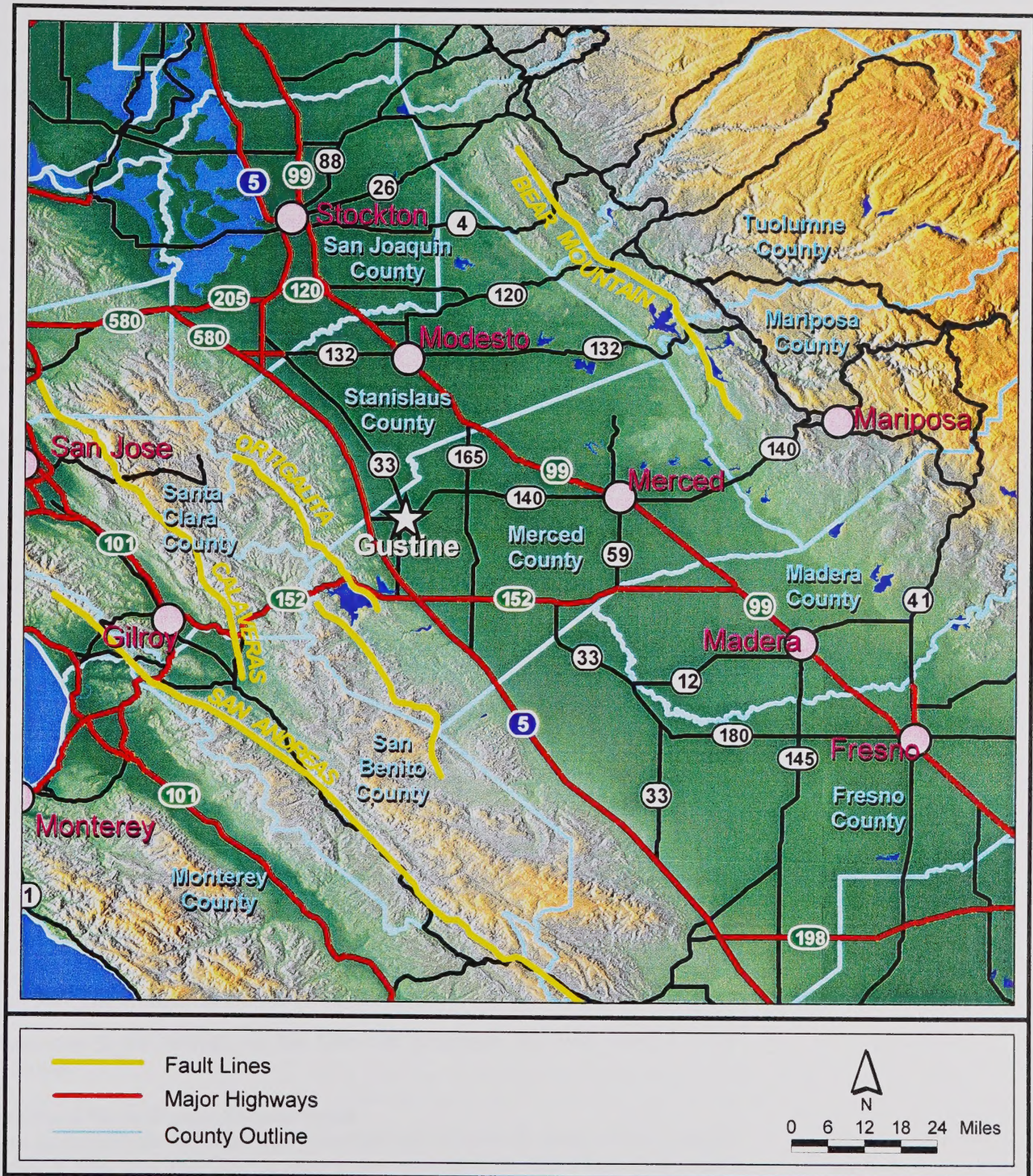
No specific liquefaction areas have been identified in Gustine; however, the potential exists due to the high water table and disposition of some soil types such as those in the wetlands adjacent to Gustine.

Tectonic subsidence occurs when loose, less cohesive soils are compacted due to earthquake shaking. This is most likely to occur where groundwater surface is deep, the soils are loose to medium in density, and the soil profile includes strata of loose and uniformly graded sand. These characteristics are not present within the Gustine planning area.

Existing Conditions



Map-EC-6: Faults of Major Historical Significance







Existing Conditions

Hazardous Buildings

Unreinforced Masonry (URM) buildings are historically known for their poor performance when subjected to earthquake fault displacement, landslide, or soil liquefaction. Consequently, URM buildings are considered a dangerous threat to life. Emergency facilities that are constructed out of URM, such as fire stations and schools, pose an even greater risk during these life threatening circumstances.

The State Division of Mines and Geology has designated the Gustine area with a Maximum Expectable Earthquake Intensity of "High Severity Major Probable Damage". These "intensity zones" identify the severity of earthquake damage which is different than the seismic zones used for building code compliance. Emergency response and evacuation for earthquakes is discussed under Emergency Evacuation routes.

Potential Dam Failure

Gustine is just west of the Potential Dam Failure Inundation Area for the San Luis, McClure, and Los Banos Creek Detention Reservoirs and would therefore be unaffected if failure were to occur.

Flooding

Flooding, more than any other weather related threat, is the greatest contributor to property loss in the United States. Fortunately, Gustine is not within a 100 year floodplain nor has it experienced a disastrous flood. The flooding that has occurred in this area is associated with poorly developed surface drainage because of flat topography, clay soils, and a high water table. In Gustine the free water depth is 5 to 20 feet below the surface. This could result in flooding associated with poor drainage.

Urban Fires

Urban fires are defined as the uncontrolled burning of residential, commercial, or industrial property. Risks involved include personal injuries, fatalities, or property damage caused by fire. Fires are accelerated due to poor building construction, lack of built-in fire protection such as sprinklers, highly flammable contents, delay in detection and alarm, inadequate fire protection equipment and the lack of sufficient water supply.

The Gustine Fire Department is made up of one chief and eighteen trained volunteer firefighters. The station is manned full time by the California Department of Forestry (CDF) whose services are paid for by the County. The City pays for building upkeep, its own fire fighting equipment, and its part-time employees. The City has a mutual aid agreement with the County to cooperatively control major fires. The County is the first to respond to fires and then city volunteers are called as needed.

Response times throughout the City and proposed SOI vary from 2 to 3 minutes.

Peakload Water Supply Requirements

The increased use of hazardous materials and the ever-present threat of arson make it clear that the Gustine area is not exempt from experiencing a major urban fire. The 1990 Water Supply Study for the City of Gustine reveals that during peak demand in the summer months peakload water supply falls short. This can be overcome with the use of the tower storage, however this only



lasts for 25 of the recommended 120 minutes. To obtain the two hour flow required, either additional storage tanks, additional wells or a combination thereof is needed (1990 Water System Study for the City of Gustine).

Wildland Fires

Wildland fires occur from a combination of climatic, vegetative and physiographic conditions and have the potential to cause loss of life and property damage. Most of the undeveloped land within Gustine is irrigated agricultural land, which has a low potential for fire hazard.

A response to wildland fires would come from federal, state, and local government fire protection agencies through an urban/ rural interface. Wildland fire hazards may be reduced by enforcement of proper building codes, use of green belting, prescription burning to control fuel load, weed abatement, and implementation of other fire safe practices. The City of Gustine subscribes to all of these practices.

Emergency Evacuation Routes

Earthquakes, fires, and flooding are all hazards that require planned evacuation routes to move residents to safer ground. For the most part, major highways such as Highway 33 and 140 would be used for evacuation. However, alternative routes including major east-west and north-south arterials (designated in the Circulation Element) and County roads should also be used. Some hazards are more predictable than others and therefore emergency responses will vary.

Intracity routes would be regulated by the California Highway Patrol in conjunction with County sheriff and City police. For more detailed information on evacuation routes see the Merced County General Plan. The City endorses and will abide by the Office of Emergency Services "Multi-Hazard Functional Plan" and any amendments made to it.

Hazardous Materials

The City of Gustine has had one serious encounter with Hazardous Materials when there was an ammonia leak at the Beatrice Cheese Co. plant in 1986 and nearby residents were forced to evacuate. Luckily there were no serious injuries because local emergency crews knew how to deal with such a disaster. The most common type of hazardous waste problem in Gustine is related to leaking underground storage tanks.

Circulation Safety

In order to provide safe circulation for all types of travel, the City has set standards for the design of building construction and circulation facilities. Design standards include building setbacks for optimum clearances around structures and minimum road widths (also defined in the Circulation Element). Speed limits are set based upon a road's designation and intended use. Crosswalks are also provided for pedestrians at strategic locations.

Canals and Drainage Ponds

The CCID canal, which borders the western edge of the City, and the storm water drainage ponds at various locations are potential safety hazards. As a precaution, warning signs have been posted and fencing will be implemented with development.

Aquatic Insect Problem

Due to the proximity of wetlands and irrigated farmland to Gustine's urban



areas, some residents may already experience problems with mosquito nuisance and associated health problems.

Open Space and Conservation

The Open Space/Conservation section is a plan for the complete long-range management, preservation, and conservation of "open-space lands" and other natural resources. Gustine has combined these elements because of the interrelated nature of the issues they address.

This Section includes information relating to the management and conservation of the city's natural resources including; wetlands plant and wildlife, soils, agricultural lands, air, water, cultural and historical resources and outdoor recreation.

"Open-space land" is defined as an unimproved parcel or area of land (or water) that is devoted to open-space and is designated on a local, regional or state open space plan. The open-space land must also meet the following requirements:

- (1) Open space for the preservation of natural resources that includes areas required for the preservation of plant and animal life, including habitat for fish and wildlife species and other natural resources; areas required for ecological and other scientific study purposes; bodies of water, which includes streams and their banks, as well as watershed lands.
- (2) Open space used for the managed production of resources, including but not limited to, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; and areas required for recharge of ground water basins.
- (3) Open space for outdoor recreation, which includes areas of outstanding scenic, historic and cultural value; areas uniquely suited for park and recreation purposes, including areas which serve as links between major recreation and open-space reservations, including utility easements and trails.
- (4) Open space for public health and safety, including areas, which because of hazardous or unusual conditions, require special management or regulation. Conditions include flood plains, watersheds, areas presenting high fire risks, areas required for the protection of air and water quality, and water reservoirs.



Conservation

The Conservation Element overlaps provisions found in the Open-Space, Land Use, Safety, and Circulation elements. It differs, however, from other portions of the General Plan in that it is almost exclusively related toward natural resources.

The Conservation Element emphasizes the conservation, development, and utilization of specified resources. In the case of Gustine, these resources include soils, water, wildlife, reclaimed land and watersheds. Flood control,



as it applies to irrigation canals, is also covered in this section.

No important mineral resources have been identified in the Gustine Planning Area. Therefore, no sites are designated as areas of statewide or regional significance. Should any significant deposits be discovered by the State in the future, the City will establish and incorporate mineral resource management policies into its General Plan.

Wetlands

There are no wetlands within the current or proposed SOI boundaries. Mixed wetland and upland areas east and south of the city consist of flats and marshes while the lands adjacent to them are agricultural.

It should be noted that wetlands are of value because the combination of shallow water and vegetation can remove pollutants from the water, increase nutrient production, provide flood storage and groundwater recharge, reduce storm erosion, create waterfowl and shorebird habitat, and provide passive and active recreation.

Plant and Wildlife

Currently, land within the Gustine SOI which has not been developed, has been cultivated for agricultural use and most native habitats have been replaced.

Soils

Soil resource protection and management issues include loss of soil through erosion, depletion, contamination, and conversion. In the Gustine area, flat terrain, as well as a high level of erosion control awareness and practice by farmers, minimizes soil erosion. Presently, there are no significant problems with pesticide contamination. Instead, soil contamination problems in the Gustine area are associated with increased salts and selenium due to agricultural drainage and irrigation practices.

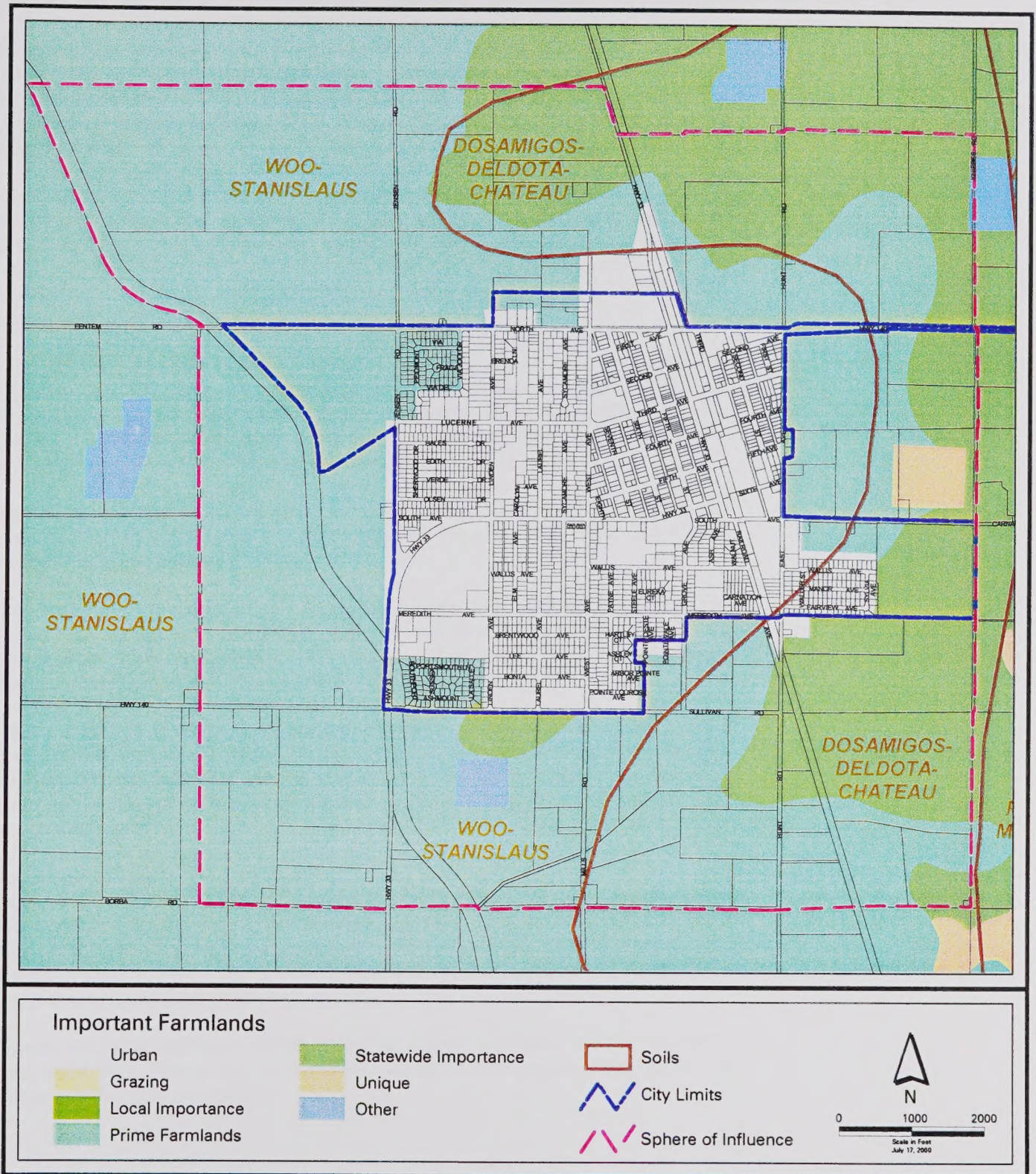
Soils could be depleted with inappropriate farming practices, but, with properly managed agricultural practices, organic content increases. In areas of urban development, natural and manmade chemical contamination is another concern.

Due to the high salt content of some soils within the Gustine planning area, and a high water table, agricultural practices need to be carefully managed. Agricultural and other open space land uses are capable of renewing and protecting the soil's productive potential and in preserving its availability. Land uses requiring structural development eliminate the soil's productivity. Therefore conversion of valuable soil resources from productive to consumptive uses should be minimized.

Map EC-7 shows that almost half of the land within the proposed Gustine SOI is being used for agricultural purposes and, according to soil data from the United States Soil Conservation Service (SCS), a large percentage of that land is rich agricultural land which does not have excess clay content.



Map EC-7: Agricultural Purpose





Existing Conditions



Existing Conditions

Even less productive soils have been enhanced by the use of tile drains, which artificially lowers the water table and gives local farmers a degree of success with orchards on the east side of the city.

Soils within the proposed Gustine SOI are predominately Woo (279), Stanislaus (254), and Dosamigos (168). Also within this area is Dosamigos (169) and Woo (274, 277). Additional soils that are within the proposed SOI are Stanislaus (255) and Woo (282). (Source: Soil survey for Western Merced County 1990).

Characteristics of the Gustine area soils include their ability to support various flora and fauna. Most of the soils are also appropriate for recreational uses such as paths, trails, golf fairways, camp, and picnic and playground areas.

Dosamigos (168) is only moderately useful for camping, picnic and playground uses due to its slow percolation rate.

Dosamigos (169) has severe problems for play areas and golf fairways because of the high clay content, and has moderate utility for other recreational uses. Soils should be tested before recreational development occurs. Some of the limitations are due to dustiness, high erosion potential, slow percolation, and a high clay content.

The Gustine area soils do not have potential as a good resource for construction materials and the soil suitability for providing sand and gravel material is improbable.

The majority of the soils have a moderate to severe shrink-swell problem that limits the location of dwellings with or without basements, as well as commercial buildings, streets and roads. Dosamigos (169) has the most severe development limitations within the proposed SOI.

The few choice sites for development also offer the best soils for agriculture and recreational uses. Most of the soils are rated "moderate" for shallow excavations because they are too clayey and wet. Most soils are judged to be good for landscaping, but a few are ranked "severe" because they possess too much clay.

Agricultural Lands

Agriculture provides the major economic base for Gustine, as it does for other west Merced County rural communities. In 1990, almost 34% of the Gustine area employment was in agriculture and its related services. Currently, the major industries are milk product processing, nut processing, and other agricultural related services such as crop dusting and land leveling.

There are approximately 1700 acres of active farmland within Gustine's proposed SOI. There are currently 474 acres of agricultural land within the City's existing SOI boundary.

**Water**

Gustine is within the Gustine Watershed and Groundwater Recharge Area. Water quality in the Gustine area is generally good. Gustine is also included within a large area on the westside of Merced County that has more than 1,000 parts per million (ppm) Total Dissolved Solids (TDS). The city water supply is drawn from four wells approximately 200 feet deep.

The west side of Merced County's surface water has high salinity rates due to the sediments that comprise the Diablo Range of the Coastal Mountains. The quality of groundwater is also determined by salt concentrations in the soil and to a lesser degree by the level of nutrients, pesticides, and other contaminants. Low quality groundwater is found throughout much of the San Joaquin Valley Basin with high levels of soil boron and TDS occurring west of the San Joaquin River.

The Gustine area has high concentrations of Nitrates, DBCP, chloride, lead and sulfate, as well as hard water problems. Groundwater quality affects drinking water, agricultural irrigation, and water diverted to wildlife habitats. In the Gustine area, where there is a high water table, salt-laden water accumulates in the soil and steadily rises as irrigation and leaching continue. Tile drains and groundwater pumping is used to control subsurface drainage that is recirculated for irrigation or is discharged through drainage ditches to marshlands of the Grasslands Water District.

Flood Control

Many of the problems that Gustine has had with flooding are associated with its flat terrain, clay soils, and high water table. There currently is no Storm Drain Master Plan. Drainage water now flows to the east, but there is an absence of adequate municipal drainage north of North Ave.

Air Resources

The City of Gustine is located near the central portion of the San Joaquin Valley Air Basin. The Air Quality of a region is determined by the amount of background pollutants present, physical location, quality of emissions and climate or the ability of the environment to disperse and remove pollutants.

The San Joaquin Valley Air Basin is considered a non-attainment area for both ozone and particulates. Non-attainment refers to the fact that the federal ambient air quality standards are violated in the region.

Emissions from urban centers to the north and west, including the Bay Area, contribute to the emissions and ozone found in Merced County. The major sources of ozone are vehicles, industry, the combustion of fuels, evaporation of paints, solvents, and aerially applied pesticides. Most particulate emissions are from stationary sources, primarily entrained road dust, construction activity, agricultural tilling/ burning and industrial sources.



Existing Conditions

Cultural Resources

The Yokut Indian tribe inhabited the San Joaquin Valley for decades until European diseases eliminated them. The Yokuts and earlier tribes left a legacy of historical culture. In the Gustine area, eighteen Native American Indian village sites have been revealed during research for the Wastewater Treatment Plant expansion. These are located primarily in the Kesterson Reservoir area. Only a small percentage of the Gustine area has been surveyed for evidence of cultural resources, and most of the area's archaeology is unknown.

Types of archaeological sites that could occur in Gustine include (but are not limited to) occupation sites, indicated by structural features such as house pits, ceremonial ("dance house") locations, and remains of sweathouses and storage structures, which are often found in areas that have been organically enriched by the accumulation of domestic debris. Occupation site deposits, often called "midden sites", are rich in materials such as charcoal, burned bone, chipped and ground stone, fire-cracked rock, baked clay, shell and glass (trade) beads, and sometimes pottery.

Other types of archaeological sites include cemeteries, isolated burials, quarry sites, petroglyph (rock carvings) and pictograph (rock paintings) sites, kill sites where animals were butchered, and sites where certain types of resources (stone, vegetal, clay, paint pigments) were obtained or processed (bedrock mortars).

Historical Sites and Buildings

Gustine was originally established as a "Colony Center" in 1895. The Federal Register lists Bridge # 39C-3 on Carries River Road over the Merced River in Gustine as a California Historic Truss Bridge.

Historic sites likely to be found in Merced County include old homes, adobes, cabins and structures or features related to agriculture, mining, logging and other enterprises. Historic resources are recognized as significant if they are more than 50 years old.

Some structures or features have been used more recently, and because of their character, associations or appearance are of local, county, state or national significance. There are several architecturally distinctive buildings in downtown Gustine which were built in the early 1900's and serve as landmarks for the community.

Outdoor Recreation

The City of Gustine presently has four parks. They are Harry Schmidt Park, a City/County regional park; Henry Miller Park, a community park; and Pioneer and Sherwood neighborhood parks. Combined, park space totals approximately 39 acres within the city limits.

City residents also have access to public open space at Gustine Elementary and High Schools; this provides roughly 14.3 acres of open space.

Existing park facilities include a swimming pool, a community center, softball



Existing Conditions

fields (some with concessions), tennis courts, basketball courts, horseshoe pits, playground equipment, barbecue and picnic areas, picnic shelters with kitchens and restrooms.

The City Recreation Commission has created a tentative list of needed park improvements which include: lights at the existing little league field, additional tennis courts, area lighting, a compact par course in Harry Schmidt Park and an additional ball field. Recreational activities in Gustine include a Fourth of July celebration, Our Lady of Miracles celebration, organized adult slow pitch and youth baseball, public swimming and various summer programs.

Gustine has a ratio of 9 acres of park land per 1,000 persons. This ratio more than adequately meets the 5 acre per 1,000 person standard.

Gustine has a ratio of 9 acres of park land per 1,000 persons. The existing ratio more than adequately meets the 5 acre per 1,000 person standard which the City will maintain as it approves development in the future.

The City has been collecting park in-lieu fees on new residential development to maintain existing parks. Park land reserve is being designated at various locations in the proposed Gustine SOI and will be developed when populations are large enough to support them and/or as new development agrees to dedicate land for recreational purposes.

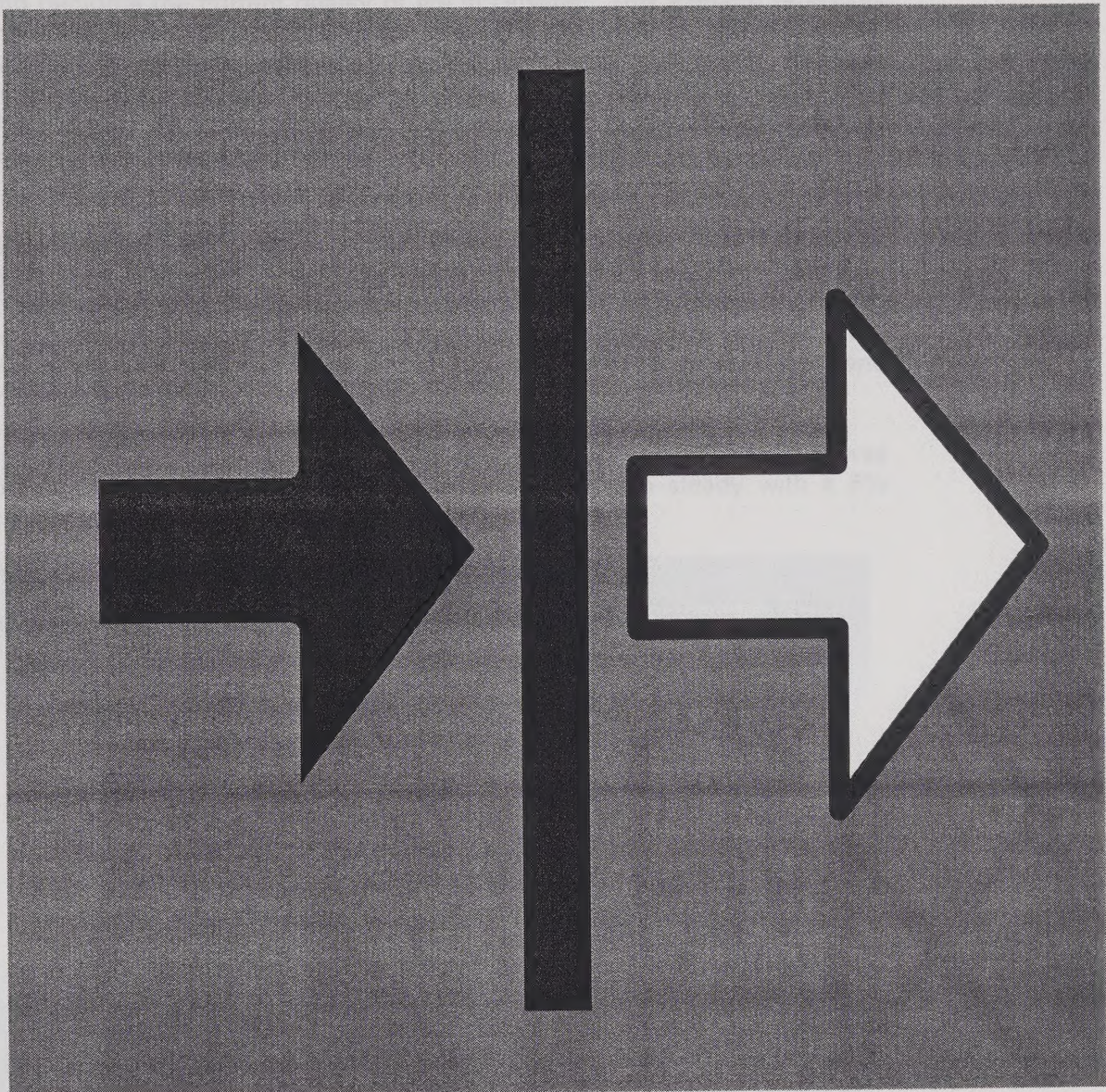


Introduction

Government Code Section 65021. The City of Quilley is a city located in the San Joaquin Valley. The City is located in the Central Valley of California, approximately 100 miles north of Los Angeles and 100 miles south of San Francisco. The City is located in the Central Valley of California, approximately 100 miles north of Los Angeles and 100 miles south of San Francisco. The City is located in the Central Valley of California, approximately 100 miles north of Los Angeles and 100 miles south of San Francisco.

CHAPTER 3 FUTURE CONDITIONS

This Local Use Change is intended to guide the City of Quilley in the future. The City of Quilley is a city located in the San Joaquin Valley. The City is located in the Central Valley of California, approximately 100 miles north of Los Angeles and 100 miles south of San Francisco. The City is located in the Central Valley of California, approximately 100 miles north of Los Angeles and 100 miles south of San Francisco.



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Introduction

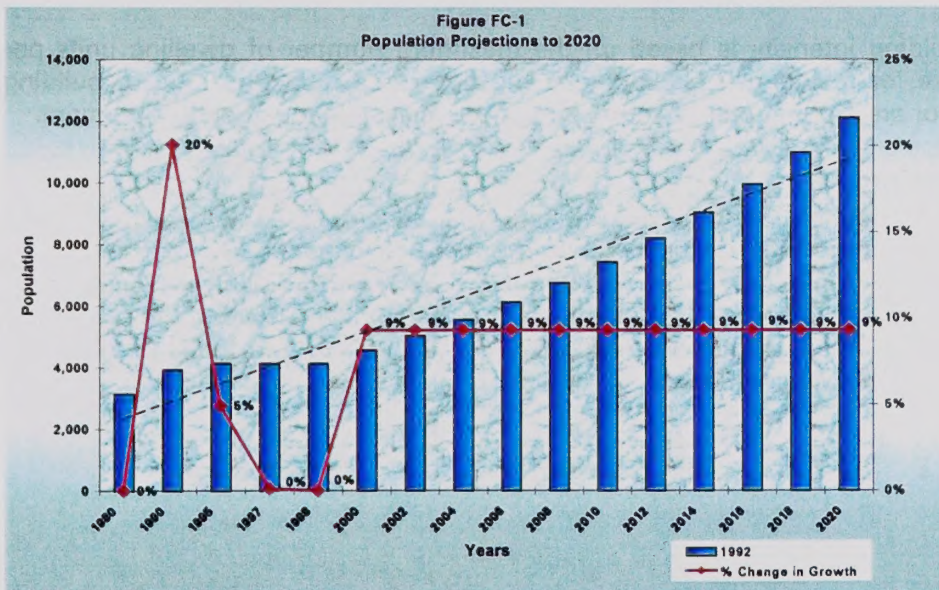
Government Code Section 65302 (a) requires that the general plan include: "A land use element which designates the proposed general distribution and general location and extent of all uses of the land including land for housing, business, industry, open space, including agriculture, natural resources, recreation and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid disposal facilities, and other categories of public and private uses of land.

This Land Use Element establishes land use goals and policies that will shape the character of the City of Gustine. The intent of this element is to support and reinforce the current quality of life in Gustine. This element promotes the achievement of land use goals through clear direction and supportive policies. The general plan is also required to maintain consistency between individual elements. Because of the nature of topics addressed in the Land Use Element, all other elements of the general plan overlap land use issues and topics to varying degrees.

Issues and Intent

Within the next twenty years, it is anticipated that there will be tremendous growth throughout the San Joaquin Valley. State forecasts, done in 1995, anticipate all industry divisions within Merced County as a whole will "experience growth, with most of the new jobs in government and manufacturing."

The percent of population growth *change* in Gustine from 1980 to 1990 was 20%. Growth in the early 1990s, however, has been steady with a 5% *change* from 1995 to 1997, Figure FC-1.



Given projections of increased growth throughout the San Joaquin Valley, the City Council has presupposed a 5% growth rate for population from 1999 to 2020. The City expects local economic stimulation through redevelopment and infrastructure improvements.



The Land Use Element identifies Gustine's goals and policies that will enable it to attract new industries while maintaining the current character of the community. The General Plan envisions the maintenance of the small town atmosphere, feasible provisions for residents' needs, and a balanced level of employment opportunities and housing mixes. Gustine intends to continue to balance its open space, productive agricultural lands, and urban uses.

Gustine is working to attract new industry and authorize the development of residential areas. The City also anticipates increases in its commuting population, based on market trends in the San Jose area. It is anticipated that as the price of land continues to increase in the Silicon Valley, businesses will look to relocate in areas such as Gustine where the cost of living and the land is cheaper.

Gustine's future land use patterns and characteristics are based upon the land use capability/suitability analysis, land use projections, and land use compatibility from the 1992 General Plan. The population density for residential land uses within the City is an expression of the relationship between dwelling units per acre (dues/acre) and persons per household, shown in Table FC-1.

Table FC-1: Growth Change and Percentage Increase					
Year	1970	1980	1990	1995	1998
Population	2793	3142	3931	4135	4140
% Change	-	11%	20%	5%	0%
Growth Rates	-	1.18%	2.27%	1.02%	0.04%

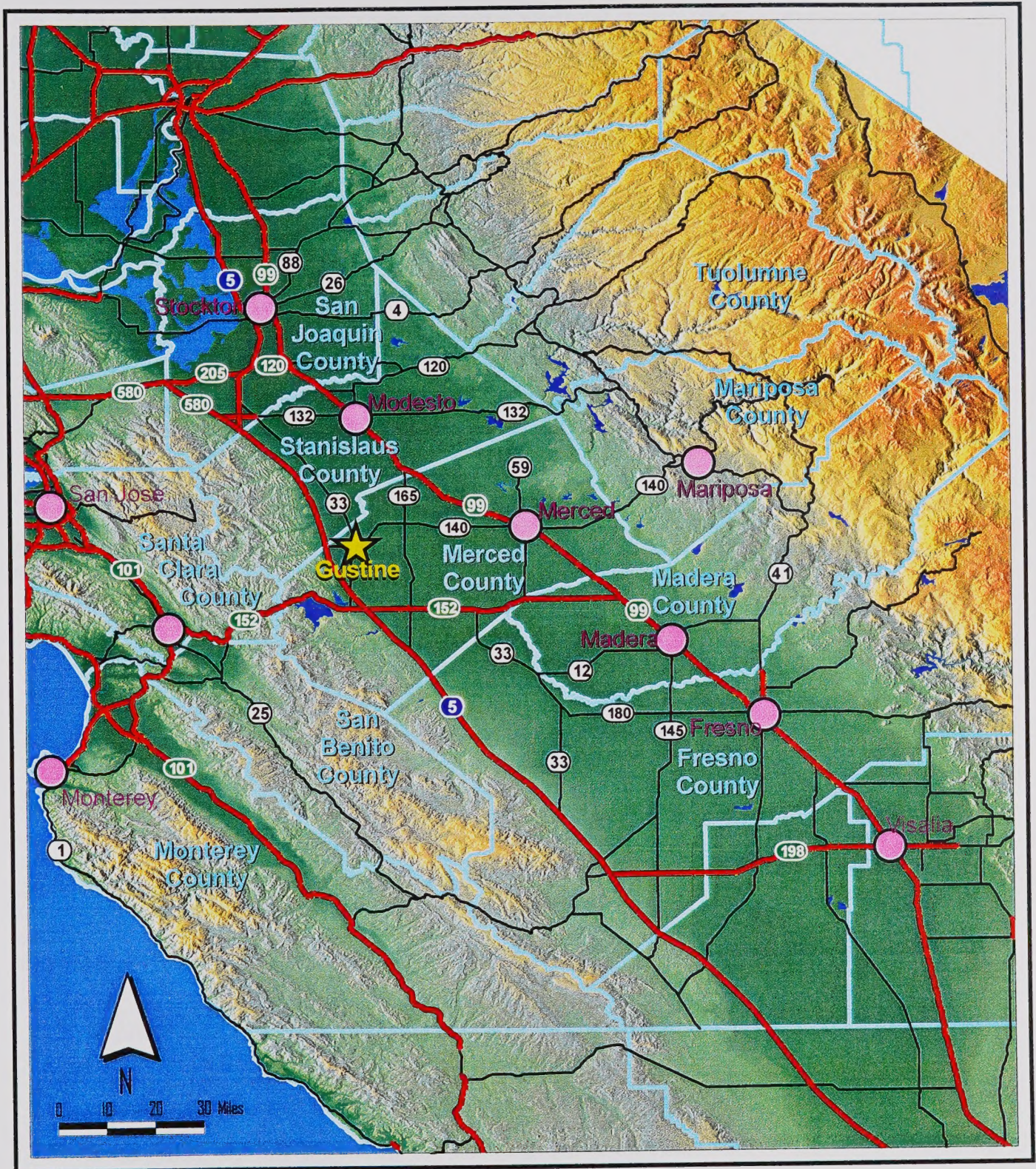
Building intensity is based on the maximum number of dwelling units per acre for residential development and floor area ratio (the ratio of building floor area to the total site area) for commercial and industrial development.

Setting

The Gustine General Plan Project Area encompasses 2682 acres which contains the City of Gustine and its Sphere of Influence (SOI). The Gustine Sphere of Influence is generally bounded by ¼ north of North Avenue to the north, ¼ mile east of East Avenue to the east, Sullivan Road to the south, and Jenson Road to the west. Figure FC-2 illustrates the location of Gustine within the Merced Region.



Figure FC-2: City of Gustine - Regional Location







Goals and Policies

The goals and policies that follow reflect the City's desire for a balanced community that is economically viable, provides for a variety of housing needs, and retains both its agricultural and small town character.

The Goals and Policies identified reflect the direction of the General Plan, hence, they are presented first as a precedent to the future land uses.

Overall Goals for Land Use

- 1) Management of the location, extent and timing of urban growth within the Sphere of Influence so that it will be compatible with the economy, natural resources of the area, and the urban service capabilities of the City.
- 2) Conservation of agricultural land to the maximum practical extent that is commensurate with the orderly growth and development of the City.
- 3) Coordination with Merced County and the Local Agency Formation Commission in planning for and regulating the use of land in unincorporated portions of the planning area.
- 4) Consistency between Zoning and the General Plan.

Specific Policies for Overall Land Use

General

- 1) Upon adoption of the General Plan or upon adoption of any subsequent amendments to it, the City will undertake any amendments to the Zoning or Subdivision Ordinances that are necessary in order to maintain consistency between them and the Plan.
- 2) Consistency between the texts of the Zoning Ordinance and Subdivision Ordinance and the General Plan will be determined by evaluating whether or not the Ordinances further the objectives and policies of the General Plan and conform with the definitions and standards established in the Plan.

Consistency Between the Zoning of Land and the General Plan

The standards and definitions specified in the Zoning Consistency Table will be used to determine the zoning that is consistent with the land use classifications of this plan. The following plan proposals apply:

- 1) Zoning is consistent with the General Plan when the permitted uses and the property development standards of a zoning district are compatible with the objectives and policies of the General Plan.
- 2) Zoning is inconsistent with the General Plan when the zoning will permit uses or property development standards that conflict with and deter the attainment of the objectives and policies of this plan. In these cases, the City will initiate the rezoning that is necessary in order to achieve consistency.

**Area- Urban Growth**

- Orderly urban expansion that supports the small town character of Gustine
- A compact urban form

Policies

- Provide land for urban development, while preserving prime and producing agricultural land, sensitive wetlands, and lands of environmental significance
- Provide a transition from urban to rural land uses by controlling development which occurs outside of the City limits, but within the Sphere of Influence
- Encourage infill development in the downtown area
- Encourage a concentrated and balanced land use pattern meeting the needs of the residents and economy of the planning area
- Provide flexibility in land use planning to be responsive to market demands
- Promote neighborhoods that provide a balanced mix of land uses and development types that are supportive of small town character
- Manage the location, extent and timing of urban growth to be compatible with the economy, natural resources of the area, and the urban service capabilities of the City.

Area- Agriculture Preservation

- Preservation of agricultural lands
- Incorporate agricultural uses for buffers between land uses
- Support continued agricultural use of prime agricultural lands

Area- Economic Development

- Encourage growth in the Downtown Area
- Design that enhances opportunity in the Downtown Area
- Promotion of suitable industrial development outside of the downtown area
- Employment opportunities

Policies

- Promote the downtown business district as a retail/commercial center
- Support Development, Expansion, and Application of Modern Communications Technology
- Provide adequate services for the operation of industry
- Continue to provide for a diverse range of commercial and industrial land to maximize opportunities for development
- Promote mixed use development combining compatible employment, service, and residential elements
- Emphasize human scale in the downtown area and pedestrian shopping activity
- Support the development of land uses that provide both daytime and evening activities
- Provide for the development of quality employment centers
- Promote and Support Development of Community Facilities and Infrastructure



Future Conditions

Area- Residential

- A varied range of housing opportunities for diverse income levels
- Quality residential environments that offer choices in housing

Policies

- Retain the integrity of existing residential neighborhoods by protecting them from incompatible land uses
- Encourage higher density residential uses closer to the downtown area

Community Character

The Gustine General Plan was a plan conceived out of a vision of the community's potential to expand. This Update seeks to revise the last plan while creating more quantifiable objectives and policies that will meet the City's needs for implementation.

In part, as indicated in Chapter Three, one of the most unique and worthwhile characteristics of Gustine, that was expressed by residents and community leaders was its small town character.

Land Use Plan Designations

State law requires general plans to include a land use diagram that designates the general location, intensity, and use of the lands within the community's project area. The Land Use Plan represents the graphic guide for the development of the community. The land use patterns and areas identified are intended to provide the basis for more detailed land use designations, densities, requirements, and standards established in the Zoning Ordinance.

Residential Uses

Recent tentative map activity, the lack of vacant available land for residential development, and the regional housing need demonstrate the necessity for designating more residential land uses at various densities. The uses being proposed are defined as follows:

Residential Estate District (RE) Allows for single-family dwellings with lot sizes of approximately 15,000 square feet. Densities are between 1 to 2 (du/net acre). This is the lowest residential density within the General Plan. This district combines the advantages of both urban and rural location by limiting development to very low density concentrations of one-family dwellings and allowing, subject to a use permit, limited farming operations. Other permitted uses may include second units, home occupations, public utility uses, and buildings, excluding equipment yards, warehouses, or repair shops, churches, schools, parks, and playgrounds.

Low (1.0 –6.0) du/ac)

The low density development provides for the development of conventional single family detached houses.

Medium (6.1-10.0 du/ac)

The medium density category provides for the development of medium density single family uses. Detached and attached single family homes, patio homes or zero lot line homes are allowed within this category. The



permitted level of density will be based upon the achievement of performance standards.

Medium/High Density (10.1-15 du/ac)

The medium high density category provides for the development of moderately dense residential uses, such as multi-family duplexes, townhouses, and small lot single family detached uses. The permitted level of density will be based upon the achievement of performance standards.

Mobile Home Park District (MPD) This designation combined with medium high density residential provides for mobile home use where the City may regulate the standards of lot size, yard and park area, landscaping, walls, signs, access and parking. A range of 10 to 20 acres is recommended, with a density of 12 du/acre.

Commercial

Gustine has four commercial land use designations. These designations and their respective building intensity standards are defined as follows:

Retail Business District (RBD) This designation includes a full range of retail services and professional and governmental offices and is limited to the central commercial core. Floor-area to site-area ratio (FAR) is assumed to be 2.00.

Office Commercial (OC) This designation would provide for a wide range of office commercial uses within the city, recognizing the need to differentiate from a general service commercial. The array of relatively small scale office activities range from professional uses such as medical, dental, and law, engineering, counseling, and architecture firms to typical commercial/business office activities like real estate and insurance agencies, financial institutions, and travel agencies.

Mixed Use

The mixed use category provides for the development and/or redevelopment and enhancement of already developed areas of complementary and creative mix of retail, professional office industrial, business park, medical facilities and higher density residential uses that are located on the same parcel or within the same project area. The intent of mixed use category is to provide the opportunity for combinations of land uses which achieve superior design or functional standards not typical of individual land uses. Mixed use projects may either be free standing within a project area, or combined in one single building. All land uses proposed within the mixed use category will be subject to special review procedures which require a site plan or development plan. The mixed use designation will be implemented by a Mixed Use Overlay Zone or similar mechanism, which may apply density bonus provisions for inclusion of low income housing in mixed-use projects.

Table FC-2 establish the primary uses, secondary uses, maximum building height, floor area ratios, residential densities, design features, and specific comments. Secondary land uses are those uses which are compatible with the primary use, yet never exclusively make up more than the primary use.



Future Conditions

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Table FC-2 establish the primary uses, secondary uses, maximum building height, floor area ratios, residential densities, design features, and specific comments. Secondary land uses are those uses which are compatible with the primary use, yet never exclusively make up more than the primary use.

Table FC-2 Mixed Use Designation Guidelines

Area No.	Primary Use	Secondary Uses ¹	Special Uses	Max. Height/Stories	Design Features and Comments
1	Residential	25% Commercial/Office	Extended Car Facility	3	▪ Pedestrian Orientation ▪ Special Sign Regulations ▪ Shared Parking ▪ Re-use of existing buildings ▪ Transitional Area
2	Residential	25% Office	Extended Care Facility or Senior Housing		▪ Pedestrian Orientation ▪ Special Sign Regulations ▪ Shared Parking ▪ Transitional Area

General and Service Commercial District (GSC) This designation includes commercial uses not appropriate to the central commercial core but provides a mixture of commercial and light industrial activities including service stations, farm equipment sales and repair, auto repair and detailing and limited food processing. Floor-area to site-area ratio (FAR) assumed is .40.

Neighborhood Commercial District (CN) This designation includes convenience and commercial activities which are located in the vicinity of residential neighborhoods and are oriented to serving them primarily. Land uses include shopping centers and a full range of retail and professional services. Floor-area to site-area ratio (FAR) is assumed to be .40.

Highway Commercial District (CH) This designation is designed to accommodate auto-oriented commerce, and the needs of highway travelers at locations of high automobile access. Floor-area to site area ratio (FAR) is assumed to be .40.

The Central Business District will undergo redevelopment in the future. As there are numerous multi-storied buildings in this area, the FAR is higher than that of other commercial districts.

Industrial

There are two industrial land use designations, which are defined as follows:



Future Conditions

Controlled Industrial (I) This designation includes industrial parks, research/office parks, warehouses and manufacturing activities not generating significant off-site impacts. Residential uses would be prohibited. Floor-area to site-area ratio (FAR) is assumed to be .40.

Manufacturing (M) This designation includes a full range of manufacturing, processing, fabrication and storage activities generating heavy truck and equipment traffic. Residential uses would be prohibited. Floor-area to site-area ratio (FAR) is assumed to be .30.

The Industrial Park concept creates highly desirable industrial sites along major rail lines and highways where there is ample land and utilities to meet industrial needs. Some industrial parks combine both office and industrial development. Gustine will use its Planned Unit Development (PUD) designation to overlay and identify its industrial parks within its Manufacturing and Controlled Industrial districts

Other Land Uses

Much of the land surrounding the City of Gustine is fallow or used for row crops. The General Plan update has re-designated all of the land within the planning area for a specific urban use.

Additional uses not previously defined include:

Agricultural-Commercial (AG-C) This designation is considered a transition zone between urban and rural uses. It provides for Ag related uses which may or may not be commercial.

Agricultural-Commercial uses are those uses that are directly related to or are a part of an agricultural enterprise or operation. Ag-Commercial uses may include, but are not limited to, agricultural contractors and service establishments, agricultural processing plants, agriculture products storage plants and storage facilities, roadside stands, agricultural chemicals, airports and airstrips, and farm equipment repair shops.

In 1992, the City Council members agreed that an Agricultural-Commercial District would be appropriate to control development outside the city limits but within the Sphere of Influence, while at the same time being compatible with the County General Plan.

Open Space (OS) This designation is an overlay category and includes publicly owned parks and recreation facilities, unimproved land, and agricultural uses. Park area is based on a ratio of 5 acres per 1000 people. Average residential density is assumed to be .20 dwelling units per gross acre.

Public (P) This designation may be imposed upon any land use. It includes government owned facilities, corporation yards, public and private schools, hospitals and quasi-public uses such as cemeteries. Park and school sites have been designated throughout the planning area based upon projected needs. In some instances the public school sites have been used as centers for new residential areas which are combined with neighborhood parks. This category depicts the location of existing, proposed and needed schools.



Future Conditions

Table FC-3 General Plan/Zoning Correlation

Proposed General Plan Land Use Category	Corresponding Existing Zoning Categories	Proposed Zone Categories
<i>Residential Estate</i>	Residential Estate	Same - RE
<i>Low (1.0 –6.0 du/ac)</i>	Single Family Residential R-1	Low Density (1.0-6.0 du/ac) R-1
<i>Medium (6.1-10.0 du/ac)</i>	Multiple Residential Districts R-3	Medium Density (6.1—10.0 du/ac) R-2
<i>Medium/High Density (10.1-15 du/ac)</i>	Multiple Residential Districts R-3	Medium/High Density (10.1 du/ac) R-3
<i>Mobile Home Park District (MPD)</i>	Mobile Home Park Combining District T	Same - T
<i>Retail Business</i>	Retail Business District C-1	C-B
<i>Office Commercial</i>	N/A	C-O
<i>Mixed Use</i>	N/A	MU
<i>General and Service Commercial District (GSC)</i>	General Service Commercial	Same - GSC
<i>Neighborhood Commercial District (CN)</i>	C-N	Same C-N
<i>Highway Commercial District (CH)</i>	C-H	Same C-H
<i>Controlled Industrial (I)</i>	I	Same - I
<i>Manufacturing (M)</i>	M	M
<i>Agricultural-Commercial (AG-C)</i>	AC	AC
<i>Open Space (OS)</i>	N/A	OS
<i>Public (P)</i>	N/A	P

Land use projections indicate that a 20 year cumulative total of 555 acres will be needed for residential development by 2020. The areas of least development limitation are immediately adjacent to the City of Gustine. These areas include property north of the City between Jensen Road and State Highway 33, east of Jensen Road to the CCID Main Canal and south of Sullivan Road to Borba Road between the Main Canal and Hunt Road. The proposed General Plan (LU-1) designates in excess of 355 acres for *new* residential development that would accommodate the City's development needs to the year 2020 and beyond.

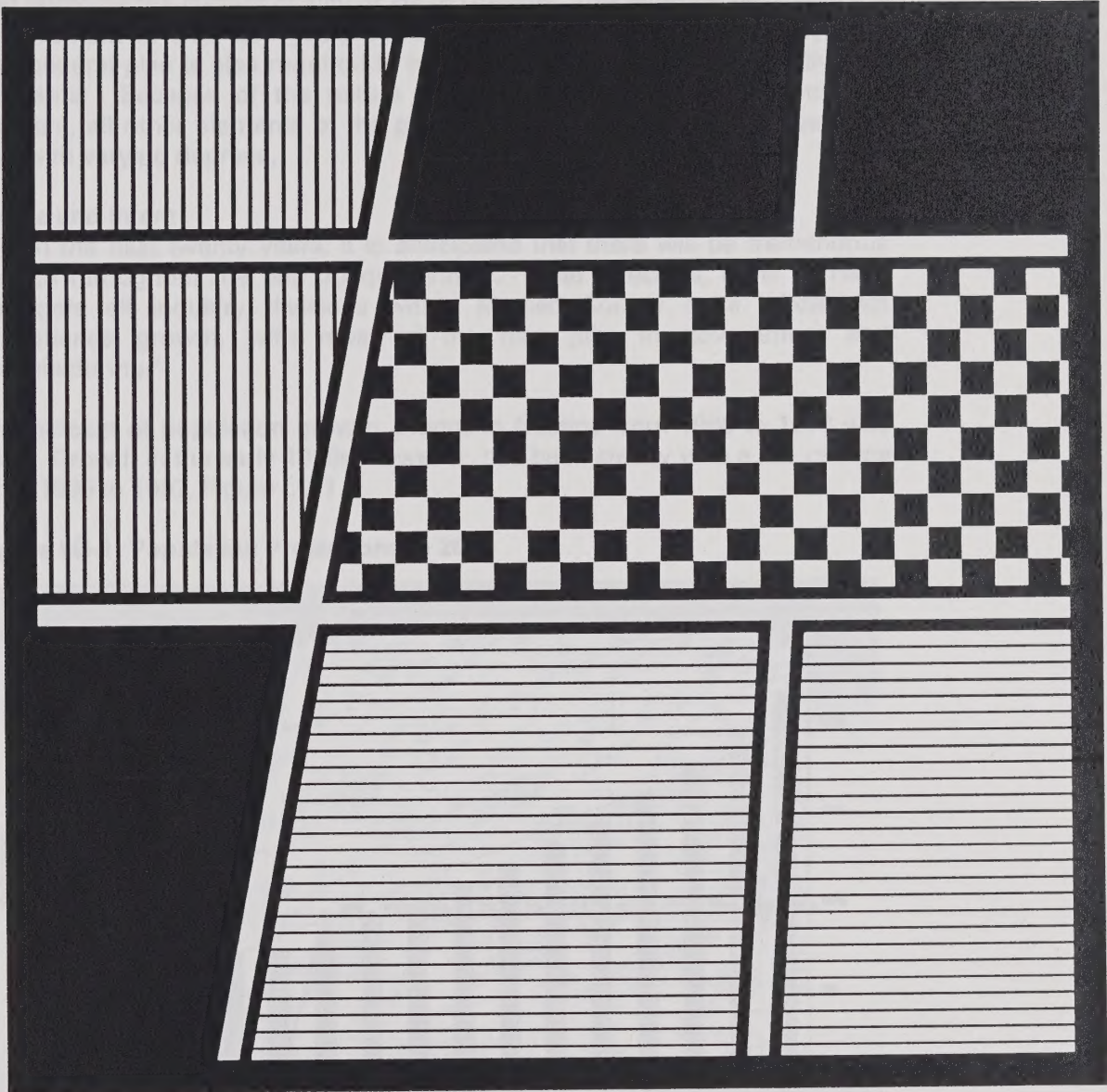


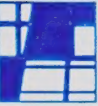
Future Conditions

The proposed residential development, with full build-out, requires the need for one new elementary school and expansion of the high school. These are designated in the Plan as "floating" sites and the City would have the flexibility of using its "Public" land use designation to modify the proposed school locations and it could also approve school construction outside of the phases being recommended.

In response to current and future development demands the City has embarked on the expansion of their wastewater treatment plant. It is anticipated that Phase I will be completed in December of 1999. Once complete, Phase I of the plan will be able to handle 1.5 million gallons of water per day. Phase II will be developed as needed and is expected to handle 2.5 million gallons/day. Once the plant is expanded, into Phase II, it will meet the growth demands through 2020 based on the population and land use projections of this General Plan.

CHAPTER 4 LAND USE





Introduction

Government Code Section 65302 (a) requires that the general plan include: "A land use element which designates the proposed general distribution and general location and extent of all uses of the land including land for housing, business, industry, open space, including agriculture, natural resources, recreation and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid disposal facilities, and other categories of public and private uses of land".

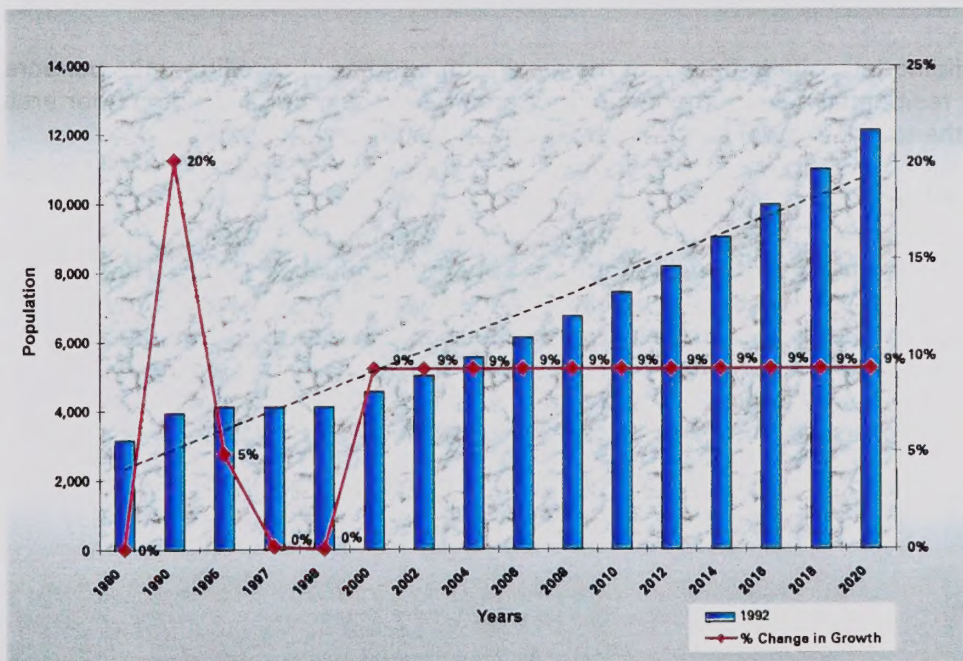
The Land Use Element establishes land use goals and policies that will shape the character of the City of Gustine. The intent of this element is to support and reinforce the current quality of life in Gustine. This element promotes the achievement of land use goals through policies and implementing actions. The general plan is also required to maintain consistency between individual elements. Because of the nature of topics addressed in the Land Use Element, all other elements of the general plan overlap land use issues and topics to varying degrees.

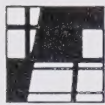
Issues and Intent

Within the next twenty years, it is anticipated that there will be tremendous growth throughout the San Joaquin Valley. State forecasts, done in 1995, anticipate all industry divisions within Merced County as a whole will "experience growth, with most of the new jobs in government and manufacturing."

The percent of population growth *change* in Gustine from 1980 to 1990 was 20%. Growth in the early 1990s, however, has been steady with a 5% *change* from 1995 to 1997, Figure LU-1

Figure LU-1: Population Projections to 2020





Given projections of increased growth throughout the San Joaquin Valley, the City Council has presupposed a 5% growth rate for population from 1999 to 2020. The City expects local economic stimulation through redevelopment and infrastructure improvements.

The Land Use Element identifies Gustine's goals and policies that will enable it to attract new industries while maintaining the current character of the community. The General Plan envisions the maintenance of the small town atmosphere, feasible provisions for residents' needs, and a balanced level of employment opportunities and housing mixes. Gustine intends to continue to balance its open space, productive agricultural lands, and urban uses.

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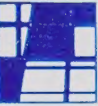
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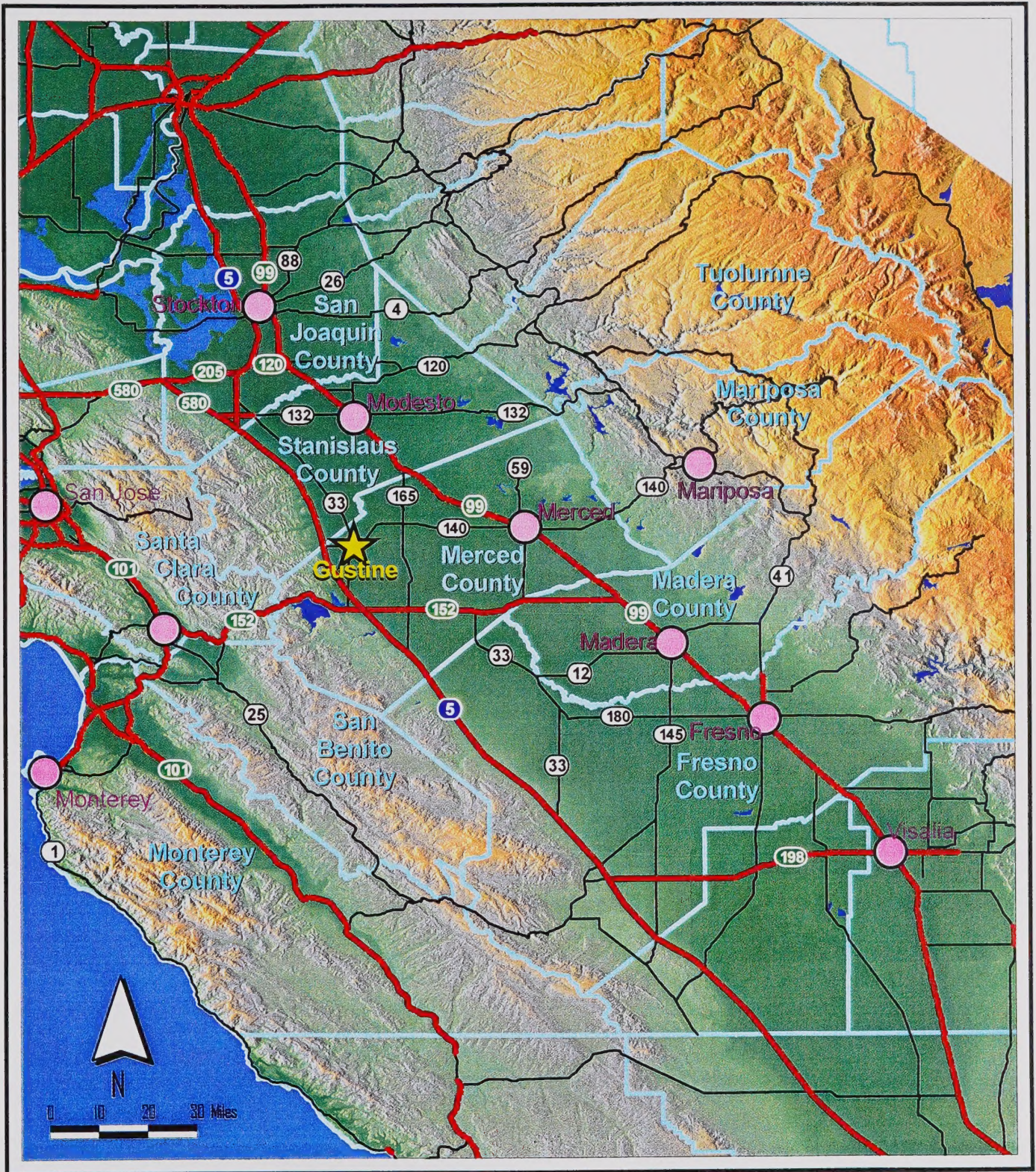
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Setting

The Gustine General Plan Project Area encompasses 993.1 acres which contains the City of Gustine and its Sphere of Influence (SOI). The Gustine Sphere of Influence is generally bounded by ¼ to ½ mile north of North Avenue, ¼ mile east of East Avenue, Sullivan Road to the south, and Jensen Road to the west. Map LU-1 illustrates the location of Gustine within the Merced County Region.



Map LU-1: Regional Location







Goals and Policies

The goals and policies that follow reflect the City's desire for a balanced community that is economically viable, provides for a variety of housing needs, and retains both its agricultural and small town character.

The Goals and Policies identified reflect the direction of the General Plan; hence, they are presented first as a precedent to the future land uses.

Overall Goals for Land Use

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- 4) Consistency between Zoning and the General Plan.

Specific Policies for Overall Land Use

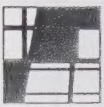
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Table LU-1 represents acreage for each of the land use designations represented by the Land Use Plan, Map LU-2. Residential densities are expressed as an average of the allowable range of dwelling units per gross acre, which correlates to a generalized lot size per acre.

Table LU-1: Land Use Acreage

Land Use	Acreage
Residential Estate	178.23
Single Family Residential	531.16
Medium-Density Residential	20.43
Medium-High Density Residential	8.70
Mobile Home Park	10.27
Retail Business District	16.80
Office Commercial	29.54
Neighborhood Commercial	3.42
Mixed Use	32.37
Highway Commercial	24.32
General Service Commercial	66.22
Park	169.63
School	64.46
Greenway	34.96
Manufacturing	186.12
Controlled Industrial	120.79
Agricultural Commercial	887.28



Residential Uses

Recent tentative map activity, the lack of vacant available land for residential development, and the regional housing need demonstrate the necessity for designating more residential land uses at various densities. The uses being proposed are defined as follows:

Residential Estate District (RE) Allows for single-family dwellings with lot sizes of approximately 15,000 square feet. Densities are between 1 to 2 (du/net acre). This is the lowest residential density within the General Plan. This district combines the advantages of both urban and rural location by limiting development to very low-density concentrations of one-family dwellings and allowing, subject to a use permit, limited farming operations. Other permitted uses may include second units, home occupations, public utility uses, and buildings, excluding equipment yards, warehouses, or repair shops, churches, schools, parks, and playgrounds.

Low (1.0 –6.0) du/ac)

The low-density development provides for the development of conventional single family detached houses.

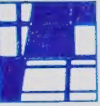
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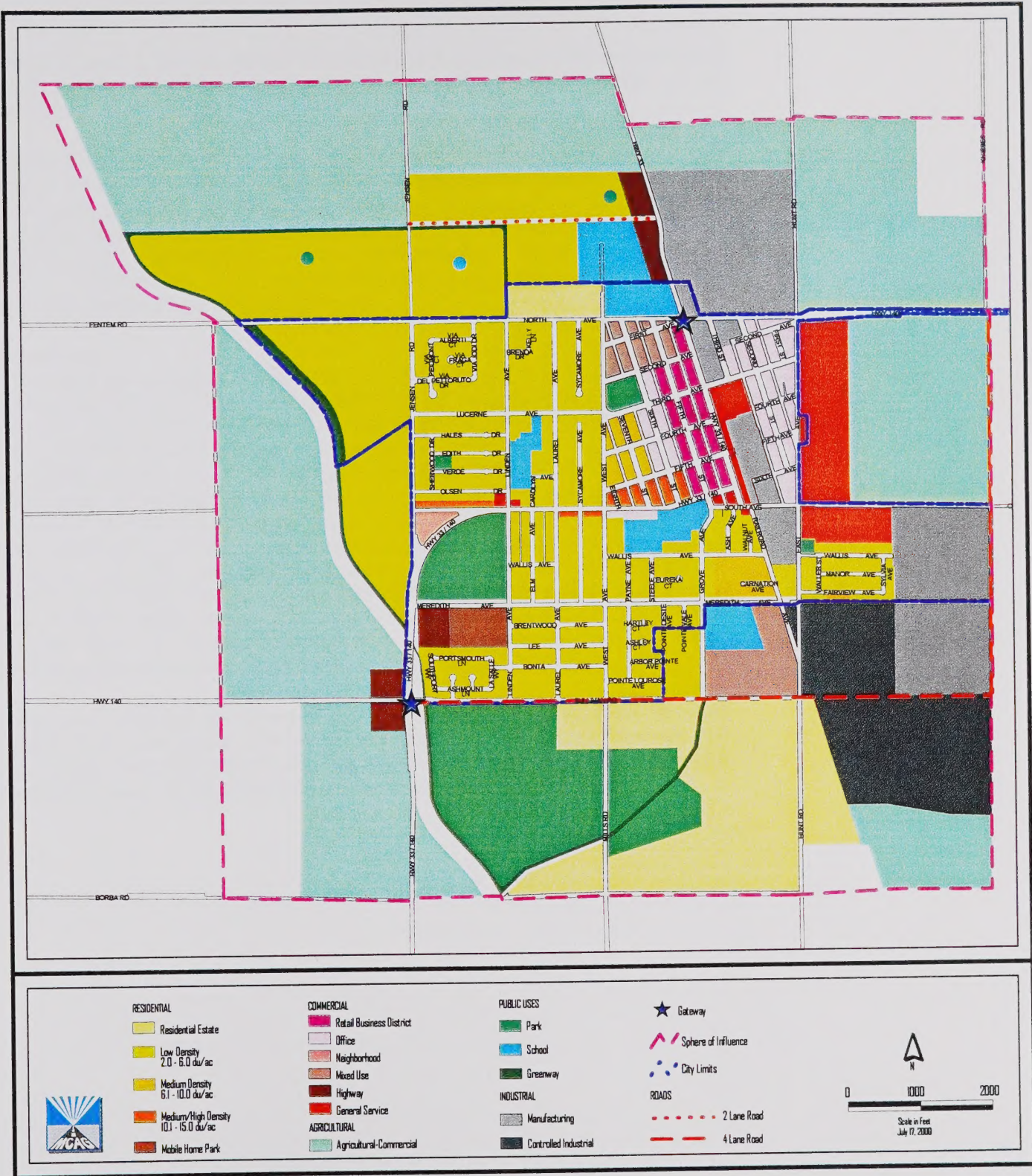
Medium/High Density (10.1-15 du/ac)

The medium high-density category provides for the development of moderately dense residential uses, such as multi-family duplexes, townhouses, and small lot single family detached uses. The permitted level of density will be based upon the achievement of performance standards.

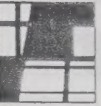
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Map LU-2: 1999 General Land Use Plan







Commercial

Gustine has four commercial land use designations. These designations and their respective building intensity standards are defined as follows:

Retail Business District (RBD) This designation includes a full range of retail services and professional and governmental offices and is limited to the central commercial core.

Office Commercial (OC) This designation would provide for a wide range of office commercial uses within the city, recognizing the need to differentiate from general service commercial. The array of relatively small scale office activities range from professional uses such as medical, dental, and law, engineering, counseling, and architecture firms to typical commercial/business office activities like real estate and insurance agencies, financial institutions, and travel agencies.

Mixed Use

The mixed use category provides for the development and/or redevelopment and enhancement of already developed areas of complementary and creative mix of retail, professional office industrial, business park, medical facilities and higher density residential uses that are located on the same parcel or within the same project area. The intent of mixed-use category is to provide the opportunity for combinations of land uses which achieve superior design or functional standards not typical of individual land uses. Mixed-use projects may either be free standing within a project area, or combined in one single building. All land uses proposed within the mixed use category will be subject to special review procedures which require a site plan or development plan. The mixed-use designation will be implemented by a Mixed Use Overlay Zone or similar mechanism, which may apply density bonus provisions for inclusion of low income housing in mixed-use projects.

Table LU-2 establish the primary uses, secondary uses, maximum building height, floor area ratios, residential densities, design features, and specific comments. Secondary land uses are those uses which are compatible with the primary use, yet never exclusively make up more than the primary use.



Table LU-2 Mixed Use Designation Guidelines

Area No.	Primary Use	Secondary Uses ¹	Special Uses	Max. Height/Stories	Design Features and Comments
1	Residential	25% Commercial /Office	Extended Car Facility	3	▪ Pedestrian Orientation ▪ Special Sign Regulations ▪ Shared Parking ▪ Re-use of existing buildings ▪ Transitional Area
2	Residential	25% Office	Extended Care Facility or Senior Housing		▪ Pedestrian Orientation ▪ Special Sign Regulations ▪ Shared Parking ▪ Transitional Area

General and Service Commercial District (GSC) This designation includes commercial uses not appropriate to the central commercial core but provides a mixture of commercial and light industrial activities including service stations, farm equipment sales and repair, auto repair and detailing and limited food processing.

Neighborhood Commercial District (CN) This designation includes convenience and commercial activities which are located in the vicinity of residential neighborhoods and are oriented to serving them primarily. Land uses include shopping centers and a full range of retail and professional services.

Highway Commercial District (CH) This designation is designed to accommodate auto-oriented commerce, and the needs of highway travelers at locations of high automobile access.



Industrial

There are two industrial land use designations, which are defined as follows:

Controlled Industrial (I) This designation includes industrial parks, research/office parks, warehouses and manufacturing activities not generating significant off-site impacts. Residential uses would be prohibited.

Manufacturing (M) This designation includes a full range of manufacturing, processing, fabrication and storage activities generating heavy truck and equipment traffic. Residential uses would be prohibited.

The Industrial Park concept creates highly desirable industrial sites along major rail lines and highways where there is ample land and utilities to meet industrial needs. Some industrial parks combine both office and industrial development. Gustine will use its Planned Unit Development (PUD) designation to overlay and identify its industrial parks within its Manufacturing and Controlled Industrial districts.

Other Land Uses

Much of the land surrounding the City of Gustine is fallow or used for row crops. The General Plan update has re-designated all of the land within the planning area for a specific urban use.

Additional uses not previously defined include:

Agricultural-Commercial (AG-C) This designation is considered a transition zone between urban and rural uses. It provides for Ag related uses which may or may not be commercial.

Agricultural-Commercial uses are those uses that are directly related to or are a part of an agricultural enterprise or operation. Ag-Commercial uses may include, but are not limited to, agricultural contractors and service establishments, agricultural processing plants, agriculture products storage plants and storage facilities, roadside stands, agricultural chemicals, airports and airstrips, and farm equipment repair shops.

In 1992, the City Council members agreed that an Agricultural-Commercial District would be appropriate to control development outside the city limits but within the Sphere of Influence, while at the same time being compatible with the County General Plan.

Open Space (OS) This designation is an overlay category and includes publicly owned parks and recreation facilities, unimproved land, and agricultural uses. Park area is based on a ratio of 5 acres per 1000 people. Average residential density is assumed to be .20 dwelling units per gross acre.

Public (P) This designation may be imposed upon any land use. It includes government owned facilities, corporation yards, public and private schools, hospitals and quasi-public uses such as cemeteries. Park and school sites have been designated throughout the planning area based upon projected needs. In some instances the public school sites have been used as centers for new residential areas which are combined with neighborhood parks. This



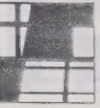
category depicts the location of existing, proposed and needed schools. These are designated as "floating" spaces so that the best suitable site is identified at the time of development.

Table LU-3 General Plan/Zoning Correlation reflects the zoning districts which currently correspond to each land use designation and recommended future zoning classifications.

Table LU-3 General Plan/Zoning Correlation

Proposed General Plan Land Use Category	Corresponding Existing Zoning Categories	Proposed Zone Categories
Residential Estate	Residential Estate	Same - RE
Low (1.0 –6.0 du/ac)	Single Family Residential R-1	Low Density (1.0-6.0 du/ac) R-1
Medium (6.1-10.0 du/ac)	Multiple Residential Districts R-3	Medium Density (6.1—10.0 du/ac) R-2
Medium/High Density (10.1-15 du/ac)	Multiple Residential Districts R-3	Medium/High Density (10.1 du/ac) R-3
Mobile Home Park District (MPD)	Mobile Home Park Combining District T	Same - T
Retail Business	Retail Business District C-1	C-B
Office Commercial	N/A	C-O
Mixed Use	N/A	MU
General and Service Commercial District (GSC)	General Service Commercial	Same - GSC
Neighborhood Commercial District (CN)	C-N	Same C-N
Highway Commercial District (CH)	C-H	Same C-H
Controlled Industrial (I)	I	Same - I
Manufacturing (M)	M	M
Agricultural-Commercial (AG-C)	AC	AC
Open Space (OS)	N/A	OS
Public (P)	N/A	P

Land use projections indicate that a 20 year cumulative total of 555 acres will be needed for residential development by 2020. The areas of least development limitation are immediately adjacent to the City of Gustine. These areas include property north of the City between Jensen Road and State Highway 33, east of Jensen Road to the CCID Main Canal and south of Sullivan Road to Borba Road between the Main Canal and Hunt Road. The proposed General Plan (LU-1) designates in excess of 355 acres for *new* residential development that would accommodate the City's development needs to the year 2020 and beyond.



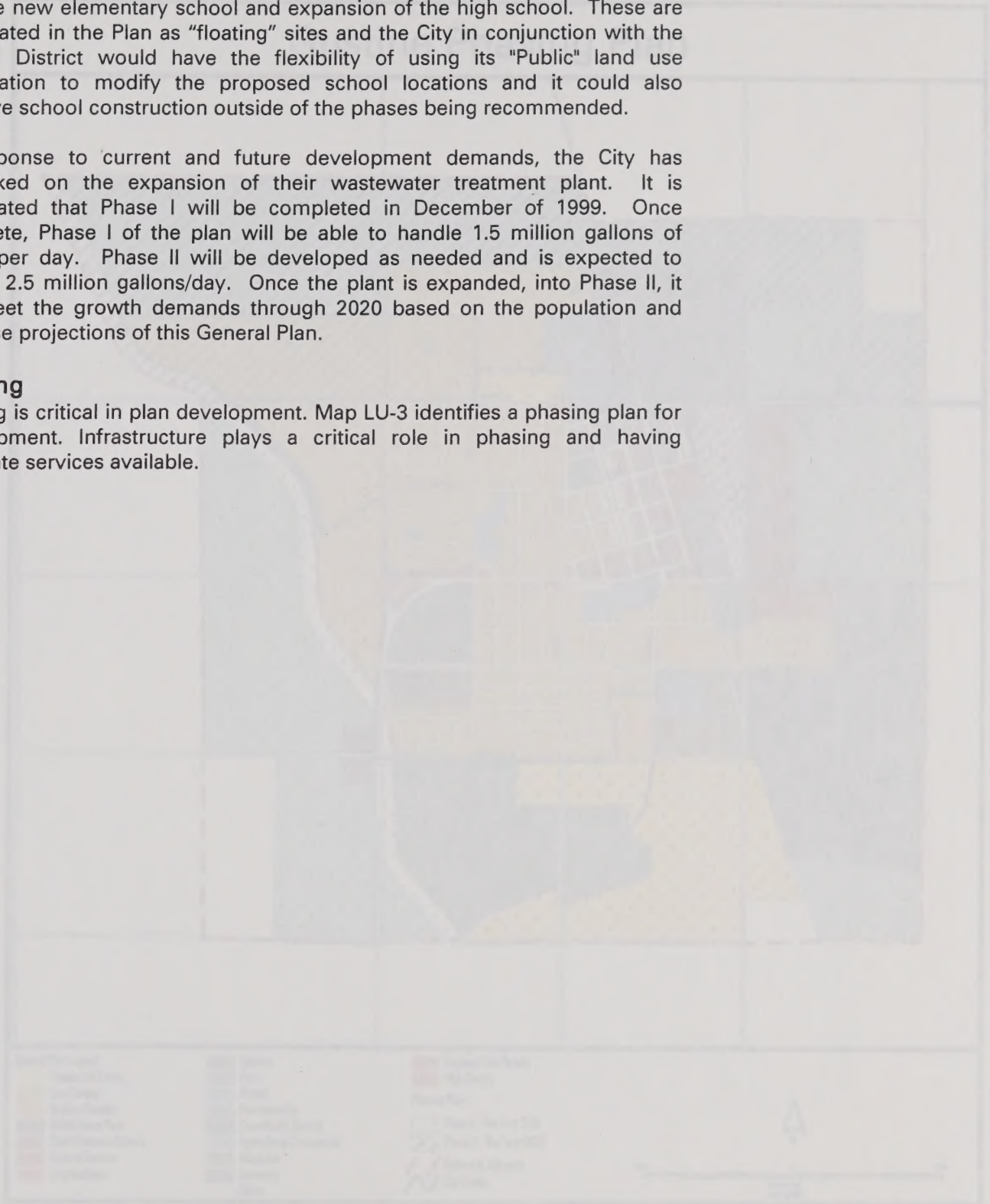
Map LU-3: General Phasing Plan

The proposed residential development, with full build-out, requires the need for one new elementary school and expansion of the high school. These are designated in the Plan as "floating" sites and the City in conjunction with the School District would have the flexibility of using its "Public" land use designation to modify the proposed school locations and it could also approve school construction outside of the phases being recommended.

In response to current and future development demands, the City has embarked on the expansion of their wastewater treatment plant. It is anticipated that Phase I will be completed in December of 1999. Once complete, Phase I of the plan will be able to handle 1.5 million gallons of water per day. Phase II will be developed as needed and is expected to handle 2.5 million gallons/day. Once the plant is expanded, into Phase II, it will meet the growth demands through 2020 based on the population and land use projections of this General Plan.

Phasing

Phasing is critical in plan development. Map LU-3 identifies a phasing plan for development. Infrastructure plays a critical role in phasing and having adequate services available.





The City of Gustine is located in the heart of the Central Valley, a region known for its agricultural productivity. The city's land use is primarily agricultural, with a focus on the production of grapes and other fruits. The city's location is strategic, as it is situated near major transportation routes, including the Interstate 5 corridor. This proximity to major highways facilitates the city's role as a distribution hub for agricultural products. The city's land use is also characterized by its diverse mix of residential, commercial, and industrial development. The city's growth has been steady, and it is expected to continue to expand in the future.

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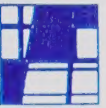
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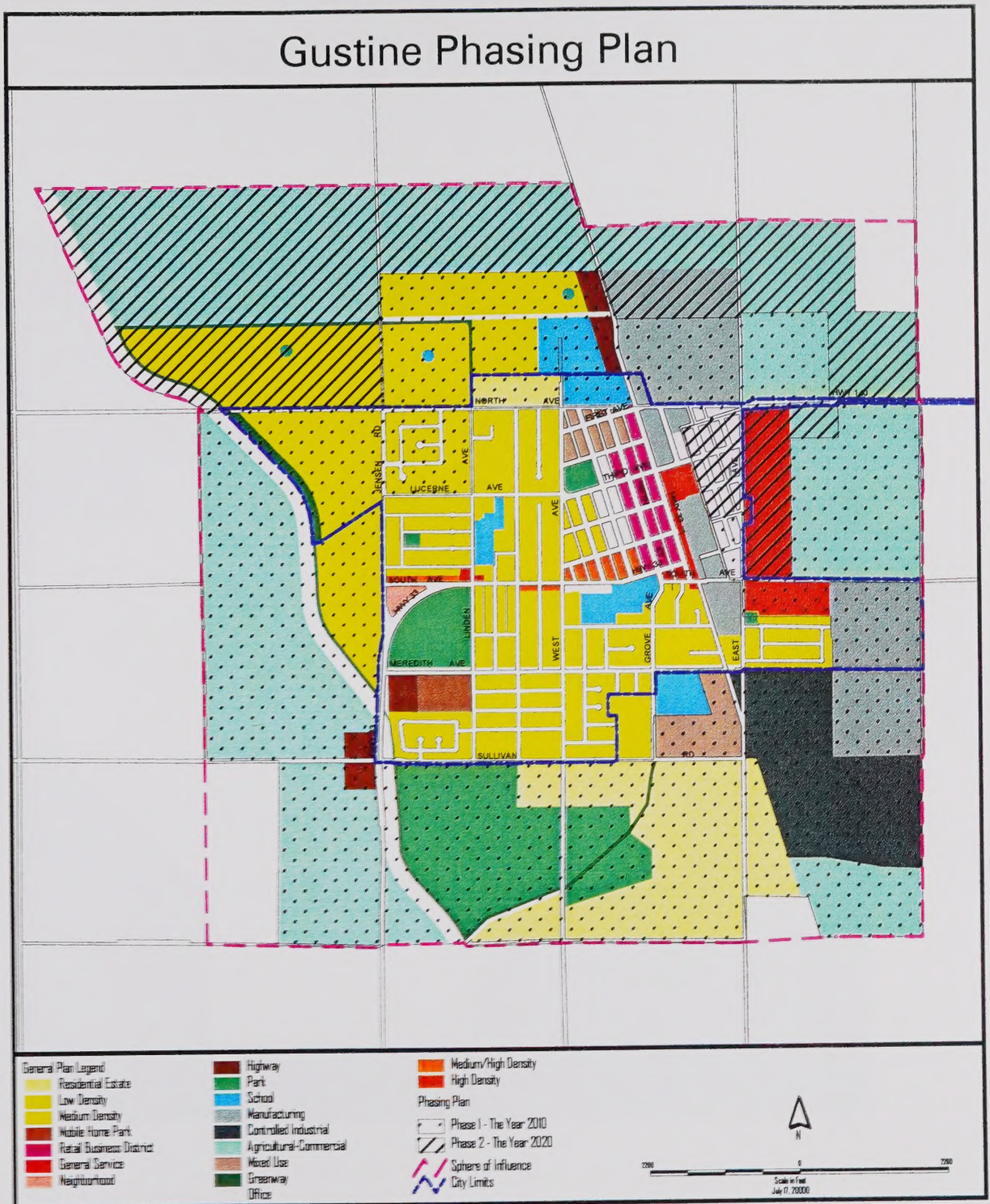
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Map LU-3: Gustine Phasing Plan





Background and Setting

All planning and development within the City and under the jurisdiction of the City Council shall be in accordance with the Comprehensive Urban Development Plan (CUDP). Although the City Council has the authority to amend the CUDP, it is the policy of the City to maintain the CUDP as a living document that will evolve as the needs of the City change over time. The City Council shall maintain the CUDP as a living document that will evolve as the needs of the City change over time.

The City of Quartz is the only incorporated city in Mineral County. Located in the City of Quartz is the primary source of the County's economic base. The City of Quartz is the only incorporated city in Mineral County. Located in the City of Quartz is the primary source of the County's economic base.

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Background and Setting

All property enclosed within the City Limit Line is part of the City and under the jurisdiction of the City Council. All decisions regarding land use, circulation, public services, etc. within the City limits are made by the City Council. Although the City is still part of the County, the Merced County Board of Supervisors has no direct decision-making authority regarding land use matters within the City limits for the most part and the services that each provide to their citizens are defined by the state.

The City of Gustine is the only incorporated city in Merced County. Planning in the City is affected by planning policies of the County. Conversely, City planning and policy decisions can dramatically affect the rural and suburban areas outside the City's incorporated limits.

Typical problems that can result from lack of coordination between city and county planning policy are:

- Development or establishment of incompatible land uses in close proximity to each other.
- Premature urban expansion without adequate supporting infrastructure or service.
- Development of low-density "suburban" type of housing in areas which could be more appropriately used for "urban" densities or uses.
- Inefficient land use and circulation patterns that can lead to increased public service costs.

The Merced County General Plan, in response to the potential problems of uncoordinated development, has adopted and implemented an "Urban Centered" concept for development in the un-incorporated areas of the County.

The Urban Centered Concept establishes a County policy of utilizing cities and unincorporated communities or centers to accomplish anticipated urban expansion needs of the County. In general, the County's plan guides future growth into established "urban areas" based on the ability of the area to furnish public services.

The stated purpose of the Urban Centered Concept in Merced County planning is to assure that:

- Growth occurs in an orderly and logical manner;
- Land is utilized efficiently;
- Agricultural operations are not eliminated prematurely;
- The County's planning efforts are complementary to those of the cities; and
- Urban development occurs where proper services are available.

The City of Gustine is located within the Gustine Specific Urban Development Plan (SUDP) area. The SUDP designation is intended to accommodate all classifications of urban land use and are otherwise known as "urban expansion areas." The SUDP boundary is recognized as the ultimate growth boundary of the City of Gustine over the life of the plan. Merced County policy



states that all land within the SUDP is planned for eventual development in a mixture of urban and urban-related uses.

The City of Gustine's General Plan builds on the County SUDP policies to provide a long term growth strategy for Gustine's future expansion.

Policies and standards of this Chapter are based on projected population growth of the City. Various methods have been utilized in projecting the City's long term growth, however, timing of annexations within the growth area are based upon actual development demand.

The overall approach of the Gustine General Plan is to develop a strategy to accommodate future population growth in the most efficient manner possible. As a result, the policies of this chapter are primarily concerned with the density and distribution of projected future population growth.

Conservation and efficiency are the guiding philosophies of this Chapter. Like many other Central Valley cities, Gustine has its origins tied directly to agricultural production. Agriculture is, and will continue to be, a major contributor to the overall economic health of the City.

As the City grows, expansion will inevitably encroach onto productive crop land. The City of Gustine is fortunate in that it is not entirely surrounded by highly productive or agriculturally significant prime soils. The Merced City General Plan utilizes the SUDP policies to guide urban growth towards the least productive soils in the region and to buffer adjacent agricultural lands from urban development.

Sphere of Influence & LAFCO

Legislative Intent:

Section 56001 of the Cortese-Knox Local Government Reorganization Act of 1985 states the concern of the State Legislature with respect to urban population densities and intensive residential, commercial, and industrial development. The broad spectrum of high-level community services and controls for these growth areas the primary purpose of the Reorganization Act and the responsibility of the Merced County Local Agency Formation Commission (LAFCO).

When rural areas become urbanized to the extent that they need the full range of community services, the Reorganization Act provides a mechanism to establish priorities regarding the type and levels of services that the residents of an urban community need and desire. This prioritization process weighs the total community service needs against the total financial resources available for securing the necessary services. The process is administered by LAFCO to assure that the priorities reflect local circumstances, conditions, and the limited financial resources of local public service providers.

The state Legislature determined that, in most cases, one single governmental service agency is better able to meet modern urban service demand than a limited service entity or special district. This overall intent can be summarized in the following overall purpose of this Chapter of the City of Gustine General Plan, consistent with the mission of the Merced County LAFCO and the Reorganization Act:



- To provide for the orderly expansion of the City of Gustine.
- To guide urban growth in the Gustine Sphere of Influence away from resource and open space areas.
- To assure that adequate levels of urban services are maintained for all residents of the community.

These purposes of the law and this Chapter are addressed more specifically as follows:

Orderly Expansion Orderly expansion is accomplished through the establishment of the Gustine Sphere of Influence within which all urban expansion of the City must occur. Within this Sphere, the City has adopted policies to assure that territory added to the City can be adequately served with City services.

Guide to Urban Growth This Chapter of the General Plan, when combined with the other Chapters of this Plan, provide a guide to new development with respect to guiding growth and development away from resource lands and into areas best suited for urban uses. Specifically, the Land Use and Open Space-Conservation Chapters of the Plan identify how and where urban uses can be developed within the City's Sphere.

Adequate Levels of Urban Services Service levels within the City's urban area are addressed within the Public Facilities Chapter of this Plan.

As part of the overall growth strategy of the City of Gustine, this Chapter of the City's General Plan addresses the specific issues that are mandated by State law and LAFCO with respect to defining the City's Sphere of Influence and processing Annexation requests.

Sphere of Influence

LAFCO under state law, is charged with the responsibility of planning and shaping the logical and orderly development and coordination of local governmental agencies. In order to carryout this mandate and to provide for the present and future needs of the County and its communities, LAFCO is required to develop and determine the "Sphere of Influence" of each local governmental agency within the County including Cities and Special or Limited Purpose Districts. In the preparation of a Sphere of Influence, LAFCO must make written statements of its determinations with respect to the following:

1. The present and probable need for public services in the area.
2. The present and probable need for public facilities in the area.
3. The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.
4. The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

This requirement of law usually results in LAFCO preparing a Sphere of Influence Study containing the necessary information for making the mandatory statements of determination. Upon completion of the study



process, LAFCO adopts the study and its determination and is required to periodically review and update the Sphere of Influence. The Sphere of Influence then becomes the basis for all LAFCO determinations regarding the organization or reorganization of the City or Special District.

With respect to issues regarding:

- Present and Probable Need for Public Services
- Present and Probable Need for Public Facilities
- Present Capacity of Public Facilities and Adequacy of Public Services

The Public Facilities Chapter (Chapter __) of this Plan provides a guide to expected *"service and facility needs"* within the City's planned growth area. Chapter __ addresses *"service needs and identifies resources that can be applied to meeting these needs in the future"*.

With respect to the issue of *"Social or Economic Communities of Interest"*, the City of Gustine and its immediate environs contain diverse economic and social interests groups as does most small cities in the region. These communities of interest have played an active role the shaping of the City's General Plan over the years and as a result, the policies, programs and implementing strategies of this Plan address these varied community needs.

Annexations

When property is annexed, the City Limit Line is changed to include that property. To be eligible for annexation to the City, a property must be within the City's Sphere of Influence boundary and contiguous (directly adjacent) to the City Limit Line. If the City agrees to annex the property, it is agreeing to provide City services (i.e. sewer, water, police, fire, garbage, etc.) to the property.

The present Sphere of Influence (SOI) for the City of Gustine encompasses approximately 1.70 square miles, or 1088.7 acres. The City Limits area is 1.55 sq. miles or 993.1 acres.

Annexation Process

Annexation of land within the City's Sphere of Influence requires two levels of approval. First of all, the City must agree to the annexation and secondly, LAFCO must approve the City's annexation proposal. While the Sphere of Influence process determines the likely ultimate service area of the City, the Annexation process must address several questions regarding a specific annexation proposal.

Section 56841 of State law the review of an annexation proposal, State Law requires that LAFCO examine the following factors:

General Characteristics:

The population, population density, land use, per capita assessed valuation, topography, natural boundaries, drainage basins, proximity to other populated areas and growth are included in LAFCO considerations. With respect to growth, LAFCO must consider the likelihood of significant growth in the area and in adjacent areas during the next ten years.



The issues of population, density, land use, topography, natural boundaries, drainage, etc are generally addressed within this General Plan. Ten-year growth needs for the City's urban area can be more difficult to define. In general, as a small community, growth projection techniques have little application. Changes in short-term economic trends, investment opportunities, etc. are major determinates of the pace of growth in an area like Merced County and the City of Gustine.

As part of the Annexation review process, the City will review and consider specific annexation proposals in light of the policies contained in this General Plan and the annexation details contained in a property-owners development plan.

Services and Service Needs:

The provision of adequate levels of public service is one of prime concerns of the Local Agency Formation process. Services refers to services and facilities provided by governmental entities such as a City, County or Special District. LAFCO is to assess the need for organized community services to an area along with the present cost and adequacy of governmental services and controls in the area. The probable future needs for services and controls along with the probable effect of the proposed annexation on existing services.

As part of the LAFCO review process, annexation proposals are required to contain a Plan for Services. This Plan is addressed specifically in Chapter PF, Public Services and Facilities.

Social, Economic and Governmental Effects

The annexation review process must include an overall examination of the effects of an annexation on adjacent areas, mutual social and economic interests, and on the local governmental structure of the County.

Traditionally, urban services are provided through the use of special districts (fire districts, sewer & water districts, community service districts, etc.) in rural and unincorporated areas of the County. Some of these special districts exist within the planned expansion area of the City. As part of the City "reorganization" process, territory must be detached from special districts prior to the land being annexed to the City.

Patterns of Urban Development

Planned, orderly and efficient patterns of urban development is an important goal of the annexation review process. The location, distribution and pattern of open space lands relative to the urban development pattern must be considered in the annexation process.

The overall pattern for open space land use within the City's Urban Planning Area and Sphere of Influence is established by the Land Use and Open Space Elements of this General Plan and the land use/open space policies of the Merced County General Plan. The location, distribution and pattern of open space lands for both the County and City are set forth in these two planning documents. All annexation proposal will be required to be consistent with these two sets of land use planning provisions.

***Agricultural Lands***

LAFCO must address the effects of an annexation proposal on the physical and economic integrity of the agricultural lands in the region. In this context, "Agricultural Lands" include land currently used for the purpose of producing an agricultural commodity for commercial purposes.

The conversion of productive agricultural land to urban purposes is governed by the policy provisions of both the City and County General Plan Conservation Elements. A proposal to annex land to the City will be evaluated in context with the policy provisions of these two planning documents.

Urban Development Pattern

The definiteness and certainty of the annexation boundaries, patterns of land ownership, unincorporated "islands" and the overall configuration of the City Limits is a concern of LAFCO with respect to reviewing annexation proposals.

The policy guidance provided by this Chapter of the City of Gustine General Plan addresses the overall configuration of the City Limits, unincorporated "islands" and the pattern of land ownership with respect to annexation proposals.

Planning Consistency

The annexation must be consistent with the General and Specific Plans of both the City of Gustine and the County of Merced. The City and County will work closely together to coordinate plan policy between the two jurisdictions and assure that City-County conflicts are resolved.

Sphere of Influence

The annexation must be within the City's Sphere of Influence and consistent with the Sphere of Influence Study for the area. The City may entertain proposals for the expansion of its Sphere of Influence where it can be demonstrated that such an expansion meets the intent and purpose of state law and the policies of both the City of Gustine and the Merced County Local Agency Formation Commission.

Local Agency Concerns

The comments and concerns of other public agencies, relative to the issues of governmental services and organization, must also be considered by LAFCO in the annexation review process. The overall objective of the LAFCO review process is to assure that a high quality of public service is provided to the County/City residents in as cost-effective manner as possible.

Urban Expansion Goals, Policies and Actions***Goal Area UE-1: Urban Expansion*****GOALS**

- **A Compact Urban Form**

UE-1.1 The City Shall Promote a Compact Urban Form.

UE-1.2 The City shall control the timing, density, and location of new land uses within its Sphere of Influence boundaries..



Urban Expansion

- **An Efficient Urban Service Area**

UE-2.1 Designate areas for new urban development that recognize the physical characteristics and environmental constraints of the planning area.

UE-2.2 Promote incorporation of developed areas within the City's Sphere of Influence during the planning period of this General Plan.

Policy UE-1.1.

The City Shall Promote a Compact Urban Form.

Implementing Actions:

- 1.1.a** Encourage development on in-fill sites by amending the Zoning and Subdivision Ordinances to better accommodate such requests.
- 1.1.b** Continue to limit the extension of City services to areas within an established Sphere of Influence boundary.

Policy UE-1.2.

The City Shall Control the Timing, Density, and Location of New Land Uses Within its Sphere of Influence Boundaries.

Implementing Actions.

- 1.2.a** Require that all new urban development be contiguous to existing urban areas and have reasonable access to public services and facilities.
- 1.2.b** Plan for public improvements/services to support designated land uses for all areas as they become suitable for development.
- 1.2.c** Develop systems to evaluate the cost of providing various services to new development and establish clear policy for meeting those costs.
- 1.2.d** The planning for land uses in newly developing areas should reflect a mix of land uses that will support a neighborhood, including a variety of residential densities and price ranges, neighborhood and convenience shopping facilities, and public facilities such as schools and parks.
- 1.2.e** Maintain a cooperative relationship with the County of Merced with respect to development and land use review and comment processes in areas along the City's Sphere of Influence fringe.
- 1.2.e** Maintain a cooperative relationship with the County of Merced with respect to development and land use review and comment processes in areas along the City's Sphere of Influence fringe.
- 1.2.f** New development within the City's Sphere of Influence shall be annexed to the City and provided with an appropriate level of urban service.



Policy UE-2.1

Designate Areas For New Urban Development That Recognize the Physical Characteristics and Environmental Constraints of the Planning Area.

Implementing Actions.

- 2.1.a Limit development and development related impacts on agricultural and resource lands along the City's urban fringe.
- 2.1.b Explore techniques to preserve areas of significant agricultural soils, buffers between, scenic areas, etc. from incompatible urban development.

Policy UE-2.2

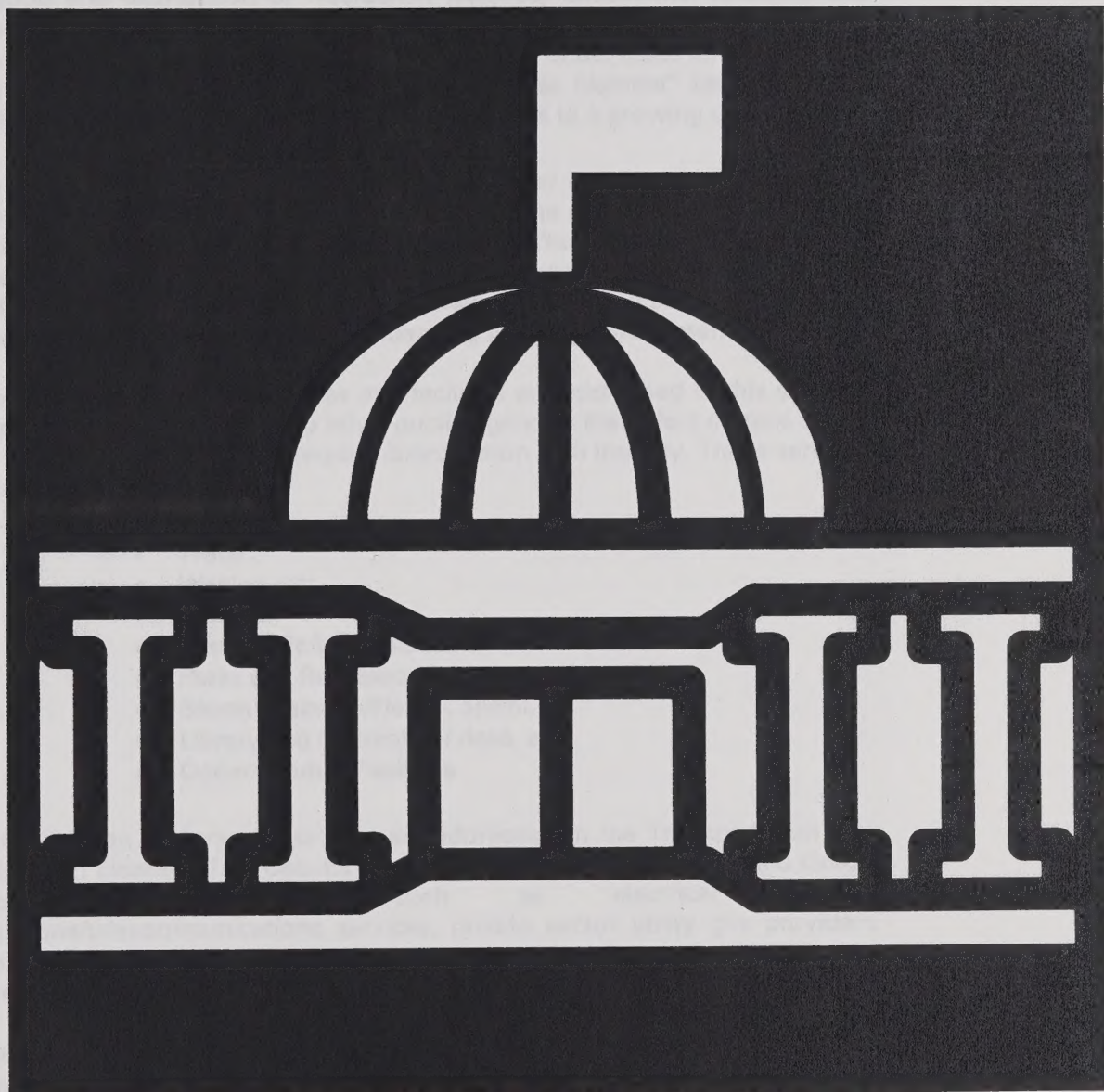
Promote Incorporation of Developed Areas Within the City's Sphere of Influence During the Planning Period.

Implementing Actions.

- 2.2.a The City should promote the annexation of unincorporated urban areas within the urban expansion boundaries that cause a duplication of public services and hinder extension of City services to new development.
- 2.2.b Review City improvement and development and land use policies and remove unnecessary obstacles to incorporation.
- 2.2.c Provide assistance to residents of City's Sphere of Influence area to address public health and safety concerns of on-site water and sewer systems.



CHAPTER 6 PUBLIC FACILITIES





7.1 INTRODUCTION

Public places provide a shared sense of belonging for all citizens of City of Gustine. They foster a humane and caring community and promote pride and mutual respect. Children develop much of their sense of community and well being from their schools, neighborhood parks, and other public places. These do more than provide public services; they are symbols of Gustine Camp and a necessary part of the collective self-esteem of the community.

The Land Use Element of the General Plan is required to address the general location and distribution of "recreation facilities, educational facilities, and public buildings and grounds" [*Government Code Section 65302(a)*], but a separate "public facilities element" is not required under State law. The City of Gustine has chosen to prepare a "Public Facilities Element" because of the challenge of providing public services and facilities to a growing community.

The goals and policies contained in this chapter address the provision of public services and facilities necessary to meet the demands of the residents of the City of Gustine now and into the future. The General Plan postulates what facilities may be needed or desired in the future. This includes looking for the most cost-effective and efficient ways of providing services as well as searching for alternative means of financing capital improvements.

A wide variety of public services and facilities are addressed in this chapter, including services provided by other public agencies that affect citizens within the City of Gustine and thus require coordination with the City. These services include:

- Water,
- Wastewater,
- Schools,
- Fire and Police Protection,
- Parks and Recreation,
- Storm Drainage/Flood Control,
- Library and Cultural Services, and
- General Public Facilities

Transportation and transit services are addressed in the Transportation and Circulation Element. This Chapter does not address Private Sector and Quasi-Public utility services such as electrical service, telephone/telecommunications services, private sector utility gas providers and similar private or quasi-public services. Parks and Recreation Policies and Standards are included in the Open Space Chapter.

This element's purpose is to assess the current status of these services in terms of system capacity and demand and to evaluate future capacity in relation to projected growth. This element is further intended to clarify service availability and to identify the costs of public service improvements associated with land use decisions. The element is designed to assure that public services are available when needed.



7.2 PUBLIC SERVICES & FACILITIES

7.2.1 General

This chapter does not prioritize or offer a method of prioritizing specific projects. Where more detailed information is needed for specific projects or types of services, the policies contained in this chapter should be used as guidelines for requiring the preparation of various master plans or studies to clearly define the need, priority, or method of providing services and facilities. In addition, use of the City's Capital Improvements Program (CIP) can establish the means of correlating public projects with the needs of the community and available funding sources. This section describes the current status of the public services.

7.2.2 Water

Brief Background Sufficient water supplies, treatment systems, and distribution facilities are basic necessities for serving urban areas. According to population projections to the year 2010, water demands could be as high as 3.19 million gallons per day. The addition of a 12" water line around the city (the loop system) would meet future domestic and fire flow needs.

7.2.3 Wastewater

Brief Background The Wastewater Treatment Plant expansion plan when complete, will provide capacity to support planned residential growth through the year 2010. Additional demands for waste water capacity over the next twenty years, for industrial and non-industrial uses are projected to be 2.9 million gallons per day, bringing the total capacity needed to 3.9 million gallons per day.

Industrial users need to be monitored through a permit system, so that plant capacity will be recorded, and additional capacity will be paid for on a fair share basis. Portions of the Linden Avenue 8" main (643 linear feet) between Lucerne Avenue and State Highway 33 may possibly need to be replaced with a larger diameter pipe to accommodate development. Additional major East/West trunk lines are needed along State Highway 140 and Sullivan Road (extended). These trunk lines will provide service to accommodate future growth to the north and south.

7.2.4 Schools

Brief Background Public schools are operated by school districts, which are autonomous governmental agencies separate from the City. The development and funding of school facilities is beyond the jurisdiction of the City but locational decisions regarding school facilities must, by law, involve City review. They have their own elected officials and source of funding. The City of Gustine is fortunate to have access to several high quality institutions of higher education. These institutions include:

Merced College offers a two-year college curriculum in a variety of subject areas.

CSU-Stanislaus California State University Stanislaus is located in Turlock, west of the City of Gustine. The University offers advance degrees and undergraduate degrees in a variety of career fields. Classes are offered on and off campus through out the University service area.



UC Merced The 1995 decision of the Regents of the University of California to locate its tenth campus at Lake Yosemite will create tremendous higher educational opportunities for students throughout the San Joaquin Valley and Sierra Foothill Region.

Adult Education

Modern education services have an expanded mission with respect to providing adult education services. These services focus on advancement of an adults educational level and provide career advancement opportunities to adults of all age groups. Another important aspect of adult education is meeting the on-going need for professional development and the updating of working individuals with respect to advances in their fields of endeavor. Adult education services provided by the local school district and the regional institutions of higher education play an important role in the community of Gustine. These adult education services are a critical link to modern technological advancement and the areas labor force. As such, the region's adult education resources become an important element in the City's economic development efforts.

K-12 Local Schools

Service Standard Service standards for school facilities are administered by the State Office of Education.

Location Standard The City has limited jurisdiction with respect to the location decisions of the local school districts. The City, however, is committed to supporting the School Districts in their efforts to expand facilities to meet growth demands. For this reason, this chapter contains guidelines for the location of school facilities. School facilities should be sited according to the following criteria. While it is unlikely that every site can meet all criteria, every site should meet most of these criteria. The ideal site should be:

- At least ten (10) usable acres for an elementary school, twenty-five (25) usable acres for a middle/junior high school, and fifty (50) usable acres for a senior high school, to adequately accommodate the loading and unloading of students, future expansion of facilities and offer design flexibility.
- Centrally located to residential development to reduce bussing requirements, reduce walking distances for young children, encourage after-hours use of facilities by the public and discourage vandalism.
- Adjacent to a street or road which can safely accommodate bike, foot and vehicular traffic. Sites should have no more than two sides with street frontage. Urban high schools are best located adjacent to collectors that can handle the increased traffic volume of student drivers and the entrance to the school should be signaled.
- Topographically and environmentally safe and suitable to reduce site preparation costs and permit maximum use of the site for physical activities.
- Of sufficient usable acreage on one level and configured to not limit the design of buildings and provide field and parking space.



- Surrounded by land uses that produce a minimum of noise and traffic, often associated with commercial and heavy industrial areas.
- Located adjacent to parks to enable joint field and recreation facility uses.
- Vacant and undeveloped to reduce financial and political costs of site acquisition.
- Located such that utilities and services (e.g., cable television, fire protection, emergency medical services) are or will be readily available, to reduce site development costs.
- Near imminent development of adjacent properties to insure road and other necessary off-site improvements are available in a timely manner.
- A safe distance, i.e., as required by law, from contaminants or toxins in the soil or ground water from landfills, fuel tanks, agricultural areas, power lines, utility easements, et. al.
- Outside of floodplains, on stable soils; away from fault lines.
- Integrated into the system of alternative transportation corridors, i.e., bike lanes, riding and hiking trails, and mass transit, where appropriate.

7.2.5 Fire and Police Protection

Location Standard The location of fire facilities is a critical factor in providing adequate fire protection to the citizens of Gustine. The time and distance that must be traveled to the scene of an emergency can determine whether fire suppression efforts will be successful. The goals, policies, and actions in this chapter address locational criteria and distribution goals for new fire facilities. Additional goals, policies, and actions relating to fire prevention methods, disaster preparedness, and hazardous materials safety can be found in the Safety Element.

The following guidelines should be considered when sitting new firehouse facilities:

- a) Fire stations should be located on streets close to and leading into major or secondary thoroughfares.
- b) Fire stations should be so located as to minimize delays caused by incomplete street patterns.
- c) A fire station should be near the center of its primary service area, measured in terms of driving time to the periphery of this area.
- d) Fire stations should be convenient to high value areas of commercial or industrial districts, but not located in them unless such a location is necessary to maintain the required service radius.
- e) Fire stations should be located, as much as feasible, away from other uses that may be sensitive to the noise impacts of frequent alarms.
- f) **Fire stations and their sites should be designed to fit in with their surroundings, including consideration of open spaces, off-street parking, landscaping, and general appearances, especially when located in residential districts.**
- g) In residential service areas, fire stations should be located in or near those sections which have the highest density.



7.2.6 Parks and Recreation

Brief Background Acquisition, development, maintenance and operation resources for the City's park and open space system must compete with many other vital City services. Historically, the systems expansion and development has been driven largely by new development.

Growth and development has resulted in a well developed park and open space system in the newer sections of the community, however, in the older portions of the city, resources have been scarce.

Long term maintenance and operation resources are extremely vulnerable to the limited City budget resources. A long term strategy needs to be developed to assure continued development and adequate maintenance of the system in future years.

Potential future park sites have been designated on the Land Use Diagram. The sites are given a "general" designation to identify areas of potential future needs. Specific site locations, however, will require more specific planning and may be included in the City's Parks and Recreation Master Plan.

Service Standard Overall, a total of 5 acres of parkland should be provided per 1000 residents in the City, of which 1.5 acres should be in Community Park and 3.5 acres should be in various forms of neighborhood parks, including village greens, school parks and other neighborhood parks. "Greenway" trails should provide bicycle and pedestrian access throughout the City and its growth areas. In addition to the five acres of City park land per thousand people, the parks and open space system is supplemented by school grounds, church grounds and such. These supplemental recreation opportunities are not included in the standard.

It is important to keep in mind that the adequacy of the City of Gustine park system should not merely be judged on the ratio of park acreage to total population. Location, facilities and user demand are equally important.

Generally, city parks are divided into four types: mini, neighborhood, community, and greenways. The concept of four types, or hierarchy, provides for park and recreation needs at varying levels; however, there is some overlap among the various types of parks and their uses. Translated into physical form, they create a system of parks.

The first three types provide active play space. Greenways connect various sites with exclusive paths for pedestrians and bicyclists, helping to link the parks into a system and the park system into the lives of City residents. Beyond the city parks are regional parks serving many communities, which are generally provided for by the County of Merced or are part of the State Park system.

Mini-Parks accommodate casual, spur of the moment recreational needs and function more as an extension of the front yards of adjoining residents. Facilities within mini-parks should be flexible but meet the needs of a changing neighborhood population. At the same time they can be tailored to the characteristics of the neighborhood. For instance, tot-lots could be



provided in neighborhoods heavily populated by children. Elderly residents may desire meeting places or garden areas. Teen-agers may prefer surfaced courts for ball games, roller-blading and skate-boarding.

Neighborhood Parks serve a larger area than a mini-park and have a wider variety of facilities to serve a larger and more diverse population. Facilities within neighborhood parks vary depending on the recreational resources available in the neighborhood. Some neighborhoods may have school facilities which supplement the City's park facilities resources. In some instances, neighborhood park facilities approach community park standards (i.e., swimming pool, lighted baseball diamonds and community meeting hall). Although there is a hierarchy to parks, there also exists certain overlap among the different levels of parks and their uses.

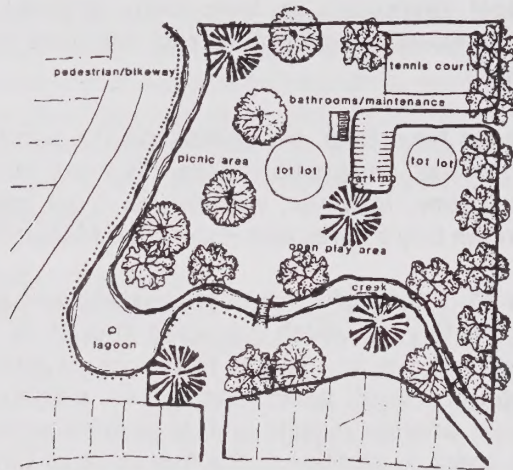


Figure PF-1 A typical Neighborhood Park provides a variety of recreation and open space elements for all age groups.

Community Parks serve significant portions of urban area based on size and type of facilities. As a minimum, a Community Park serves several neighborhoods. A community park is the nucleus of the park system and is usually the location where members of the community congregate for city-wide functions or programs.

The community park is usually over 15 acres in size and includes neighborhood playground facilities as well as appropriate facilities for city-wide use. Or, it may be more open space oriented providing the community a break within the urban environment or contact with nature and pleasant surroundings in which to engage in a variety of active and passive recreational activities.

Features of a community park may include large picnic areas, swimming pool, baseball diamonds, nature trails, soccer fields, playgrounds, community building or other city-wide activity areas.

Greenways connect the various park sites with paths exclusively for pedestrians and bicyclists. Greenways weave through the residential neighborhoods connecting larger public uses (schools, open space, commercial uses) and provide many points of physical and visual access to the park sites. Some greenways may also act as mini-parks because of play



Public Facilities

and exercise equipment placed along the paths. Other greenways act as valuable open space greenbelts through a neighborhood.

Private Recreation Facilities In addition to public park facilities and programs, there are a number of private or commercial recreational facilities serving the community. These extend the recreation opportunities for City residents. Included are racquet ball courts, bowling lanes, swimming pools, various church-operated facilities, local gyms and fitness clubs, and nearby golf courses. Private and commercial facilities are a valued supplement to the recreation programs offered in the City of Gustine.

Location Standard When feasible, use the following criteria to locate parks:

- a. No household should have to walk more than approximately one-half to three-quarters of a mile to a park site.
- b. Parks should be located adjacent to schools as much as feasible.
- c. Provide visual, pedestrian and vehicular access to all parks by requiring them to front on public streets on as many sides as possible and not be surrounded by privately owned property. Adequate parking facilities should be provided where needed.
- d. Neighborhood park sites should front on at least one side on a collector street, with the remaining sides on local streets. Community or Regional parks may front on Arterials.
- e. Park sites should be located so as to incorporate naturally-occurring open space features, such as significant stands of trees, riparian and wildlife habitat, scenic vistas, and creeks and drainage canals.
- f. Park sites should be located adjacent to bikeway facilities.
- g. Park sites should be located near higher-density residential areas as much as possible.
- h. Parks should have access to nearby subdivision and Greenways by means of cul-de-sacs, access easements, etc.

Park and School Facilities:

A 5 to 10 acre neighborhood park should be associated with each elementary and junior high school. These schools and school parks should be centrally located, placed at the edge of a neighborhood center and along greenways when possible.

Greenways:

Greenways weave through the residential neighborhoods connecting larger public uses (schools, open space, commercial uses) and provide many points of physical and visual access to the park sites. Some Greenways may also act as mini-parks because of play and exercise equipment placed along the paths. Greenways act as valuable greenbelts of open space through a neighborhood. Greenways should be designed in association with bike paths, trails and pedestrian ways and follow creeks, canals, power line easements, etc.

Greenway design should emphasize access. Access has a major effect on whether a Greenway is used. If a Greenway is hidden, tucked away in a neighborhood, enclosed by high fences and non-maintained, the public may avoid using them and they may become unsafe.



Neighborhood Park

Neighborhood parks should be distributed so most areas are less than one-mile from any park. Within any square mile quadrant bound by arterial roads, a total of 3.5 acres of neighborhood parks should be provided per 1000 residents.

In the location, design and maintenance of neighborhood parks, it should be kept in mind that they are fundamental features of livable and enjoyable higher density neighborhoods. Neighborhood park sites should reinforce retail and residential areas by creating "town squares" suitable for informal gatherings, public events, as well as recreation. Neighborhood parks should create a formal focus in a neighborhood area.

Community Park

Standard: There should be at least 1.5 acres of Community Park provided per 1,000 residents. Community parks usually 15 acres in size or greater. Community parks are major recreation facilities and contain many ball fields, playlots, picnic opportunities and other facilities.

7.2.7 Storm Drainage/Flood Control

Brief Background The city's storm drainage system is generally linked to the natural drainage system in the region. Culverts and other types of facilities have been constructed over the years to facilitate the movement of flood waters to the natural drainage system of creeks. The City recognizes that it needs to complete a Storm Drain Master Plan and begin to provide drainage facilities. Before development can occur, drainage zones need to be identified for the entire planning area.

Service Standard As the future peak flows increase with proposed new development, it is recommended storm water detention facilities be provided to detain these excess flows so that peak runoffs and velocities in the main channels do not exceed the existing storm conditions. This will eliminate additional flooding due to increased discharge as a result of urbanization. The criteria to attenuate storm water discharges from new development to pre-developed quantities, however, is based on the assumption that the channels and crossing structures downstream can handle the existing storm runoffs. New discharge standards are expected to be implemented by the Environmental Protection Agency that will require municipalities to implement some sort of treatment program for stormwater before it is directly discharged into the surface water system.

Location Standard General governmental facilities, including the City Hall, should be located to facilitate access with adequate parking for the convenience of the public.

Other Infrastructure

The issues affecting the placement and/or relocation of additional transmission lines are aesthetics, the possible reduction of usable land, and the safety of surrounding residents. In order to reduce visual impacts, transmission lines rated below 45 KV should be undergrounded when possible; this also reduces maintenance costs.



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The placement of distribution and transmission lines, whether under-ground or above, affects the use of land by restricting the placement of most structures within utility easements. The use of large amounts of land for public utility easements also removes land from the tax rolls. The safe placement of transmission lines and towers reduces and/or eliminates hazards between structures, crop dusting activities and airport approach zones.

Demand for additional electric service will occur with the residential, commercial and industrial growth projected in the Land Use Element. P.G.& E. has indicated that electricity and gas are readily available to accommodate growth throughout the entire San Joaquin Valley through the year 2020 and beyond. Future development will necessitate the rerouting of some transmission lines and may require an additional P.G.& E. substation.

There is no immediate need to abandon any of the canals as a result of development of agricultural parcels within the Gustine SOI. However, many cities do require the undergrounding of drains and canals as urban development replaces agricultural land. This reduces safety hazards, minimizes any disruption to local road networks and increases canal efficiency. This solution is costly however, and unless the CCID changes its policy, development adjacent to canals will only be required to fence off their areas. Where the decision is left to the City, it will encourage pipelining canals. It is also in the best interest of the City to pipeline canals at roads where bridges are in need of repair or expansion. The City will work with CCID on this matter to arrive at a satisfactory solution.

7.3 PUBLIC SERVICES AND FACILITIES PLAN

7.3.1 Purpose

The purpose of this the Public Facilities Chapter of the City of Gustine General Plan can be stated as follows:

To give guidance to City officials on the provision of high quality, well-maintained physical systems and facilities that serve the social, economic, cultural, safety, and other needs of the community, that are equitably distributed and are available at the time of development to serve new growth.

This Chapter contains six main policy areas:

- adequate public facilities and services,
- funding for capital facilities,
- programming for capital facilities,
- maintenance of capital facilities,
- economic development and neighborhood revitalization, and
- capital facilities location and design.

These six major policy areas have been approached from several directions. They must address the necessary state, regional and county coordination, and they must address the capital facilities requirements of the City, and they must relate to other planning areas such as land use, transportation and utilities.

**7.3.2 Adequate Public Facilities and Services**

It is the intent of the City to provide adequate public facilities and services for both existing and new development. Such facilities and services will be designed to meet the capital facility needs of the community and to support the City of Gustine land use growth and development concept.

The City recognizes that the provision of facilities and services is necessary in a community to provide for the health, safety and welfare of the community.

They are, potable water, sanitary sewer, storm water management, law enforcement, fire, emergency medical service, schools, parks, libraries and City administrative facilities (City Hall, the City Council Chambers, etc.). The City of Gustine intends to provide these facilities and services concurrent with development impact or within a reasonable time. The City intends to monitor the level of service provided for such facilities and services on a regular basis to ensure they are adequate and that appropriate levels of capital resources are expended.

Certain types of the above-mentioned facilities are difficult to site because of their nature, but are still essential to the city, county, region or state. Many of these facilities are ones that serve an area or population larger than the city itself. The City of Gustine intends to encourage such facilities to locate within the city as appropriate. In siting such facilities, the surrounding land uses, land use compatibility, the capital facility needs of the community and region, and financial considerations should all be reviewed.

In the long term, approximately 20 years, the City of Gustine intends to achieve the level of service standards set forth in the following table.

CAPITAL FACILITY TYPE	LEVEL OF SERVICE STANDARD
Fire	0.00167 apparatus per capita
Emergency Medical Services	0.00033 units per capita
Law Enforcement	0.500 square feet per capita
Library	0.500 square feet per circulation
Municipal Buildings - General Government/City Council Chambers	2.50 square feet per capita
Parks	0.005 acres per capita
Open Space/Wildlife Habitat	0.002 acres per capita
Potable Water	1,000 gallons per household per day
Sanitary Sewers	250 gallons per household per day

However, the City may establish other levels of service in the interim. When designating level of service standards, the City of Gustine will consider the public health and safety, community goals and desires, funding resources available and possible phasing of standards to achieve the desired level of service. Because adopted level of service standards affect the amount of growth and development, the quality of public facilities and services, and the amount of taxes and impact fees; the City will establish reasonable standards



that allow orderly growth and development and that are within the City's financial capacity.

7.3.3 Funding for Capital Facilities

Finding money for capital improvements has become increasingly difficult. The cost for new projects and for rehabilitation of old facilities is increasing beyond what cities can afford. Also, the citizens are becoming reluctant to tax themselves further via general obligation bonds to pay for expensive facilities unless there are compelling reasons for the improvements.

Besides bonds, other common sources of money are state and federal grant programs. These funds are usually restricted to specific types of improvements and are often one-time funds for unique purposes. Therefore, such grants limit the local facilities and programs for which they are available.

In spite of the financial obstacles facing local governments today, the City of Gustine intends to provide funding for adequate public facilities and services for existing development and new growth. The City will review its entire financial picture on a regular basis to ensure knowledgeable and appropriate expenditures are made to meet the capital facility needs of the community. The City of Gustine will review existing revenue sources and develop potential new sources to fund capital facilities needed for new growth, community revitalization and economic development and for the maintenance of existing facilities.

7.3.4 Programming for Capital Facilities

A *Capital Improvement Program* shall be prepared, adopted and maintained by the City. The City intends to coordinate the selecting and budgeting of all capital projects and to review, update and modify capital projects on a regular basis in order to ensure the provision of adequate public facilities and services. The community's capital facility needs and the financial capacity will be reviewed systematically and regularly to facilitate appropriate and informed decisions regarding capital facility projects and expenditures. In reviewing capital facility needs, the needs of the county, and region will also be considered. This systematic review must be consistent and contain all identified funded and unfunded capital projects.

The City has limited resources to allocate among the several capital facility planning areas. By establishing the level of service standards for each of the capital facility planning areas and adjusting the available revenues, the City establishes the relative priorities among the types of facilities. Priorities also need to be considered and set for different capital improvements or projects within any given type of facility or service. These decisions will be made each time the City performs its capital facility programming. In making such decisions, revenues generally should be allocated in accordance with the following priority listing:

1. Repair, remodeling, renovation or replacement of obsolete or worn out facilities that contribute to achieving or maintaining standards for established levels of service.
2. New or expanded facilities that reduce or eliminate deficiencies in levels of service for existing demand.



3. New facilities and improvements to existing facilities that eliminate public hazards not otherwise eliminated by facility improvements prioritized under 1 or 2 above.
4. New or expanded facilities that provide the adopted levels of service for new development and redevelopment during the next six fiscal years. If the planned capacity of facilities is insufficient to serve all applicants for development permits, the projects should be scheduled to serve development in the following priority:
 - (a) previously approved permits for redevelopment,
 - (b) previously approved permits for new development,
 - (c) new permits for redevelopment, and
 - (d) new permits for new development.
5. New facilities and improvements to existing facilities that significantly reduce the operating cost of providing a service or facility or otherwise mitigate impacts of facilities on future operating budgets.
6. New facilities that exceed the adopted level of service standards for new growth during the next six years by either providing excess capacity that is needed beyond the next six years or by providing higher quality facilities than usual City design specifications for the facility.
7. Facilities not described by 1 through 6 above, but which the City is obligated to complete by a written agreement executed prior to the adoption of this plan.

Improvements that provide level of service standards beyond the adopted level may be constructed. However, such improvements must not make improvements needed to achieve or maintain the adopted level of service standard financially infeasible and must be consistent with the goals and policies of the *City of Gustine General Plan*.

This review of capital projects and their funding should be performed at least biennially as part of the City's budget process for two reasons. The first reason is to ensure an ongoing review of capital needs. The second reason is so the capital and operating budgets can be considered together. Traditionally, in times of fiscal restraint, allocations for capital improvements are reduced or eliminated because of operating costs. However, because of the City of Gustine intent to provide adequate public facilities and services to serve existing and new development capital improvements can no longer be put on the back burner.

Actual revenue does not always match projected revenue. In cases where revenue falls short of the projection, the City will review the capital facilities programming effort and reassess its overall growth strategy. These will be



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adjusted to ensure that funding and needs are balanced by reducing the level of service standard; increasing the use of another revenue source; decreasing the cost, and therefore the quality, of the facility; decreasing the demand for the facility or a combination of these actions. Occasionally, unexpected money becomes available through donations or new grant programs. In some instances, the City may use such funds for capital improvements.

The selecting and budgeting process will also require coordination among the City departments and other agencies that provide capital facilities and services as well as coordination with other jurisdictions and on the regional level. Coordination will also be required between the various elements of the *City of Gustine General Plan*. It is especially important for the capital facilities program to be consistent with the land use, transportation and other elements.

Another issue concerning the selecting and budgeting of capital projects is the fiscal impact of major public projects or projects involving the expansion of capacity or service areas. The City of Gustine intends to consider the fiscal impacts of such projects, when deciding what projects to develop and budget.

7.3.5 Maintenance of Capital Facilities

Maintenance of existing capital facilities is important to protect the public's investment in them. The City intends to maintain its capital facilities. One way to ensure such maintenance is through a comprehensive maintenance program. Any comprehensive maintenance program should contain an inventory of existing facilities including their age, condition, extent of use, remaining useful life and maintenance history. This complete assessment of existing capital items helps in determining future major maintenance, repair and replacement needs and is necessary to make good investment decisions. In order to choose between maintenance, repair, replacement or abandonment of an existing capital facility, it is necessary to know the condition and the rate of deterioration and compare this with the costs and needs for a new facility. Other advantages of routine preventative maintenance include the possible reduction or postponement of replacement costs and the avoidance of unexpected costs and emergency repairs.

The maintenance and replacement of existing capital improvements must be considered first before planning for major investments in new facilities. The expected use, demand and future growth of the city needs to be compared to see if the current capital facilities can meet the needs of the future. The City of Gustine intends to consider the maintenance, rehabilitation or reuse of existing facilities as one way to meet the capital needs of the population.

The City will consider requests for maintenance and repair of capital investments and requests for new capital facilities concurrently, because maintenance or possible upgrade of existing facilities may be a viable method of meeting the community's needs. Evaluating maintenance needs at the same time as requests for new facilities gives the City the entire capital needs picture. All the necessary information to make selection and expenditure decisions will be available and the decision makers can determine whether existing facilities can meet the community's capital needs or whether new facilities will be necessary.



Finally, the City intends to consider the future maintenance and repair costs of new capital items when making selection and expenditure decisions on new capital facilities. It may well be that a change in design or materials could result in future maintenance savings. If the City cannot pay for subsequent operating and maintenance costs of a facility, that facility should not be provided.

7.3.6 Economic Development and Neighborhood Revitalization

Economic development and neighborhood revitalization are two very important concerns of the City of Gustine. They are both vital to a community's health and well-being and they are directly related to the quality of life of the community's citizens. Capital improvements are one of the most direct ways that officials can influence the development of their city and neighborhoods. It is perhaps the best method of transforming plans into reality. Therefore, linking economic development with capital facilities planning is essential. Providing quality infrastructure is also crucial to a community's economic development and its neighborhood quality.

As funds for capital expenditures become increasingly scarce, the City will be trying to achieve maximum leverage from its public investment. It is the City's intent to strategically use public funds to assist and encourage private investment and development that will foster economic diversity and viability and preserve quality neighborhoods. The City intends to allocate resources to strengthen the economic base, diversify industrial and commercial enterprises, increase employment opportunities, increase the income level of residents, and enhance and revitalize its neighborhoods.

Because capital needs often exceed the ability to pay for them, choices must be made and the potential return to be gained from different capital improvements takes on a significantly greater importance. Therefore, the City of Gustine intends to use its limited resources to its best advantage by strengthening the link between economic development planning and capital facilities planning, and emphasizing the support role that infrastructure and capital improvements provide to development and neighborhoods.

In the past, a link between economic development and capital facilities planning has existed, but it needs to be strengthened. Economic development planning in the city has tended to focus on responding to specific needs and requirements of specific firms and industries. It is a flexible process that is able to respond to changing demands and needs. Capital improvement planning is longer term and hence is difficult to use to foresee economic development needs and opportunities. More closely linking these two types of planning will provide great benefits and will improve both economic and capital facilities planning. The long-range nature of capital facilities planning will force economic planning to look farther into the future and to analyze the entire economic community rather than focusing on individual businesses. This will allow the City of Gustine economic needs to be identified and goals to be established. Once economic goals are developed, the City can begin to identify what public investments are needed to support these objectives. Enlistment of the private sector in identifying needs, developing goals and setting objectives will be beneficial.

Historically, infrastructure and capital improvements were used extensively to attract development to a community. The relationship between public



infrastructure and private investment was one of the most critical incentives to allocate funds for improving and building capital facilities. The building of infrastructure was considered an investment that was paid off by private economic activity.

Today, most of the city's infrastructure is in place and its capacities established. The economic advantage of having infrastructure and capital facilities is less clear because most other cities also have such facilities. However, the quality and type of infrastructure available is an important factor in a business's decision on where to locate originally and on whether to expand at an existing location or to move. It is also important to residents and potential residents. Because a deteriorating infrastructure may well be an economic deterrent, it is desirable for the city to maintain its facilities to both attract and retain private enterprise and residents. Therefore, the City of Gustine intends to emphasize the role that infrastructure and capital facilities play in the development of the city and the quality of its neighborhoods.

7.3.7 Capital Facilities Location and Design

The location and design of capital facilities are important to a community and have become one of many issues which cause citizen concern. The siting of facilities must complement the needs of the public, environment and ensure compatibility with surrounding land uses. The City of Gustine intends to meet the needs of the community:

- By providing public facilities and services that are equitably distributed throughout the community,
- That are located and designed to be safe and convenient to the people they serve,
- That provide flexibility of use and maximum efficiency, and
- That are compatible with adjacent uses and the environment.

Siting of future facilities will become increasingly difficult as the available supply of land diminishes and because, in some cases, public reaction to siting choices may be negative. Also, siting of capital facilities is not always considered prior to providing service to new development; this can leave poor choices for placing facilities. Some facilities are more difficult to site than others.

The City realizes that all capital facilities, including those that are difficult to site, provide needed public services. The City of Gustine will coordinate with other jurisdictions in the region to site capital facilities and will not exclude such facilities from its jurisdiction. The City will also work with surrounding jurisdictions to identify lands useful for public purposes, some of which would be appropriate for capital facilities.

Because capital facilities may serve the community for long periods and become a part of the community, their design is important. The City intends to consider aesthetics in the design of all public facilities subject to public view. Facilities should be located and designed to create a minimum disturbance of the aesthetics, social interactions and urban design of the community. Public projects should provide for public access and should include elements for public use and enjoyment such as landscaping, furniture, art and lighting, where appropriate. Landscaping should be provided to beautify and screen areas and to improve compatibility with adjacent



development. Landscaping should be designed to provide variety similar to that observed in the neighborhood with special consideration for drought tolerant plants to conserve water and help ensure plant survival. Naturally occurring land forms and ecosystems should be protected and enhanced where possible. Parking lots for public facilities should be limited in area and visual impact.

7.4 IMPLEMENTATION

This section identifies implementation strategies for making decisions concerning the financing and provision of capital facilities and services. It also identifies the activities necessary to carry out those decisions. The *Public Facilities Chapter* is unique in that it not only contains strategies for implementation but is in itself a necessary step for implementing other elements of the *City of Gustine General Plan*. Successful implementation of the seven major policy areas involves coordinating all the elements of *City of Gustine General Plan* and all the components of the capital facilities planning effort.

In order for the plan to be a meaningful tool in capital facility planning, the policies need to be implemented through a variety of methods including the development of procedures and programs, the adoption of regulations and the study of potential revenue sources. The plan not only expresses a philosophy, but states specific actions in the form of strategies to assure that the philosophy gets transformed into action in administrative, legislative and programmatic activities.

By accomplishing the recommended strategies, the City Council can be assured that actions at the staff level are consistent and compatible with their expressed intent. Both the local government officials and agency service providers can use this plan as a base for continued joint planning of capital facilities and services.

7.4.1 Implementation Strategies

The objectives concerning the provision of capital facilities and services that are outlined in this Chapter cannot be achieved through goals and policies alone. Goals and policies provide ongoing guidance, but action to achieve objectives can only be addressed through strategies.

The "Strategies" carry out the intents of the policies and may contain activities that are specific tasks required to accomplish the strategy. The strategies range from general to specific and respond to both immediate and long-term needs. Some recommended strategies may require an expenditure of money from either public or private sources, or both, while others may require a change in administrative procedures or municipal regulations. Strategies do not lend themselves to a listing by order of priority. They are all important enough to be implemented concurrently, although emphasis may be placed on one or more specific recommendations at a particular time. The *Public Facilities Chapter* gives more specific direction regarding implementation. Over time, individual strategies or activities will be implemented through the six-year program. At that time, the specific strategy or activity will be developed into an objective and further detail in the form of tasks will be provided.



The strategies are directed toward the seven policy areas: Adequate Public Facilities and Services; Funding for Capital Facilities; Programming for Capital Facilities; Maintenance of Capital Facilities; Economic Development and Neighborhood Revitalization; and Capital Facilities Location and Design. They are set forth below with any accompanying activities.

7.4.2 Adequate Public Facilities and Services

Strategy: Develop, implement and administer a concurrency management system to ensure provision of adequate public facilities and services.

Activities:

Maintain and update an inventory of all facilities, including the condition and capacity of the facilities.

Review and update level of service standards.

Regularly review capital facility needs and adjust the concurrency management system as necessary.

7.4.3 Funding for Capital Facilities

Strategy: Continue to research and update available options to finance capital facility projects, improvements and maintenance and seek additional revenue sources.

Activities:

Review existing sources of revenue available for funding of capital facilities.

Identify potential new sources of revenue for funding of capital facilities. Include such sources in the *Capital Improvement Program*.

Establish an interdepartmental finance team to develop and explore different financial options to be used in capital facilities management and development.

Support efforts of the California League of Cities development potential amendments to state law to provide additional or greater sources of revenue for capital facilities and work to achieve such amendments.

Identify ways to reduce the costs of capital facilities and improvements by utilizing new materials and technologies.

Review option of implementing a Redevelopment program in the City.

Strategy: Establish a process to determine priorities for capital investment. Use the interdepartmental finance team to assist in establishing such a process.

Define the scope and range of capital investments.

Review potential factors to use for determining priorities.

Establish capital facilities investment priorities.

7.4.4 Programming for Capital Facilities

Strategy: Establish and use a process to review and determine the selection and budgeting of all capital projects.

Activities:

Review and update all components of such process at least biennially including facility inventory, level of service standards, capital facility needs and financial capacity analysis.

Develop a project tracking system to monitor capital project development and expenditure of funds on individual capital



projects.

Develop a financial management system to monitor the expenditure of all capital facility resources. Use the interdepartmental finance team to assist in development of such system.

Develop procedures concerning analysis of fiscal impact of projects meeting the threshold as defined in this *Public Facilities Chapter* and the City's *Capital Improvement Program* including the detail of analysis required and when it is required.

Maintain and use the Capital Facilities Technical Team to coordinate planning between City departments, outside agencies and special districts.

Monitor the effect of capital expenditures on the *City of Gustine General Plan* growth and development concept.

Strategy: Evaluate various methods of balancing proposed capital projects and funding including lowering level of service standards, increasing revenue, reducing demand and creating service areas.

7.4.5 Maintenance of Capital Facilities

Strategy: Research and prioritize various maintenance approaches.

Activities:

Identify maintenance options.

Prepare a cost/benefit analysis of the maintenance approaches.

Identify the consequences of deferred maintenance.

Strategy: Develop a comprehensive schedule for the maintenance of all capital facilities including funding for such maintenance.

Activities:

Develop and maintain a comprehensive inventory of existing facilities that includes age, condition, intent of use, useful life, maintenance history and maintenance requirements.

Identify a schedule for the major renovation and replacement of capital facilities that are deteriorated, inefficient, obsolete or of insufficient capacity.

Establish a maintenance program for each new facility upon construction.

7.4.6 Economic Development and Neighborhood Revitalization

Strategy: Strengthen the link between capital facilities and services planning and economic development planning.

Activities:

Address capital facility and infrastructure needs in an economic development plan.

Develop a process to identify and fund the infrastructure improvements needed to meet the economic development goals of the City. Involve the business community in these efforts.

Explore options to maximize the economic development and neighborhood revitalization impacts of capital facility improvements and expenditures.



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7.4.7 Capital Facilities Location and Design

Strategy: Incorporate into the urban design plan capital facilities location and design measures.

Strategy: Review the *City Zoning Code* special use permit requirements to ensure adequate provisions to site essential public facilities and county-wide and statewide facilities are included. Amend as necessary.

7.5 PUBLIC FACILITIES GOALS

Goal PF 1: Adequate Public Facilities

Policy PF 1

- 1.a. Maintain level of service standards for each type of public facility and provide capital improvements needed to achieve and maintain the standards for existing and future populations.
- 1.b. Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy or use, or within a reasonable time as approved by the City, without decreasing current service levels below locally established minimum standards.
- 1.c. Development shall be approved only if adequate public facilities or services needed to serve the development are available at the time the demand for the facility or service is created or within a reasonable time as approved by the City.
- 1.d. Continue to develop and maintain City services that ensure optimum service levels at reasonable costs to both existing and newly annexed areas.
- 1.e. Through long-range planning, anticipate utility and other public service needs of possible future annexation areas, and when feasible develop utility capacities to meet these needs.
- 1.f. Growth and development throughout the urban area should be regulated, stimulated, and otherwise guided toward the development of compact concentrated areas to discourage sprawl, facilitate economical and efficient provision of utilities, public facilities and services, and expand transportation options to the public.
- 1.g. Pursue advanced telecommunications technology improvements throughout the City in both public and private sector infrastructure.
- 1.h. Work with telecommunications companies to establish high speed telecommunications links in Gustine.
- 1.i. Develop a Master Plan for the City's storm water drainage system.

Goal PF 2: Adequate Funding for Capital Facilities

Policy PF 2

- 2.a. Pursue all available funding sources for the development of capital improvement projects in order to optimally use limited City resources.
- 2.b. Increase the tax base by encouraging and supporting the rehabilitation and improvement of the dilapidated and deteriorated areas of the



City.

- 2.c. Establish a growth impact fee program that adequately supports the costs of providing municipal services to new residents businesses and industry.
- 2.d. Research the potential to apply redevelopment Tax Increment Financing techniques for the improvement/replacement of infrastructure in older portions of the City.

Goal PF 3: Timely Programming for Capital Facilities

Policy PF 3

- 3.a. Annually evaluate existing public facilities and community needs to determine necessary public improvements
- 3.b. Ensure that the *Capital Improvement Program*, and all associated capital facility documents are compatible with the City's General Plan
- 3.c. Coordinate and cooperate with federal, state, regional and local jurisdictions, private industry, businesses and citizens in the planning and development of facilities affecting the community.
- 3.d. Coordinate with the State, the Merced County Council of Governments (MCAG), Merced County and other adjacent local government agencies in an effort to provide a set of standardized codes and regulations relating to capital facilities and community improvement.
- 3.e. Support and encourage efforts for the cooperative planning, design and development of public facilities with other government jurisdictions and with the private sector to maximize efficiency, reduce costs and minimize impacts on the environment.

Goal PF 4: Adequate Maintenance of Capital Facilities

Policy PF 4

- 4.a. Encourage the development of capital improvement projects that improve the City's operational efficiency or reduce costs by increasing the capacity, use, and/or life expectancy of existing facilities.
- 4.b. Carefully evaluate potential benefits to be gained by the development of proposed capital facilities with the City's ability to operate and maintain such facilities.
- 4.c. Develop and use programs to improve and maintain the physical infrastructure of the City.
- 4.d. Encourage the maintenance, rehabilitation and renovation of existing community facilities in order to maintain a high level of quality service and to prevent the deterioration of facilities.
- 4.e. Encourage the adaptive reuse of existing buildings as community facilities in recognition of scarce resources.

Goal PF 5: Vital Economy and Revitalized Neighborhoods

Policy PF 5

- 5.a. Stress projects that stimulate the economy by expanding employment



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opportunities, by strengthening the tax base or by encouraging private investment opportunities.

- 5.b. Stress the development of capital improvement projects that promote tourism and convention trade.
- 5.c. Encourage capital improvements in areas in need of neighborhood revitalization.
- 5.d. Emphasize capital improvement projects which promote the conservation, preservation or revitalization of commercial, industrial, and residential areas of the city
- 5.e. Initiate and encourage initiation of programs to improve and maintain the physical environment of the business community.
- 5.f. Improve opportunities for new businesses and commercial developments to locate in a well-balanced system of competitive centers.
- 5.g. Recognize that the needs for public safety services may vary with the characteristics of the different neighborhoods and their residents, and provide services to each of the neighborhoods at a level commensurate with the needs of each.

Goal PF 6: Efficient Capital Facilities Location and Design

Policy PF 6

- 6.a. Consider land use compatibility, capital facility needs and financial costs when siting essential public facilities.
- 6.b. Encourage the acquisition of building sites for public and quasi-public purposes to be of sufficient size to meet future as well as present needs.
- 6.c. Encourage community facilities to be located and designed to obtain maximum flexibility, utility and multiple use.
- 6.d. Locate community facilities so as to be convenient, safe, and close to the areas they serve, with access to arterial streets and public transportation.
- 6.e. Encourage the design of new and the improvement of existing community facility sites and structures in a manner which permits their intended functions to be performed safely, efficiently and effectively and which minimizes ongoing maintenance costs.
- 6.f. Permit expansion of established community facilities, where appropriate, to allow for their continued usefulness provided the neighborhood and area are not detrimentally affected.
- 6.g. Stress projects that are energy efficient or enhance energy conservation efforts by the City and its residents.

7.6 PUBLIC FACILITIES FINANCING

Since the passage of Proposition 13 in 1978, California cities have been faced with unprecedented challenges in financing capital improvements necessary to community growth. No longer can cities simply adjust property tax rates to raise needed money. Instead, cities have turned to a variety of other means to finance critically needed facilities.



The City of Gustine is no exception to this problem. Because the city has grown rapidly since 1980--at roughly double the State's growth rate--the community is having problems keeping up on capital facilities such as roads, bridges, and parks. The projected growth of the community far outpaces the amount of money available to pay for this needed infrastructure.

The City has traditionally financed needed capital facilities from its General Fund, grants from State and federal governments, developer contributions, sewer and water funds accumulated from user fees, and some miscellaneous sources. The City's General Fund, however, is under increasing pressure just to pay for City operations. State and federal grants are decreasing. Other sources of revenue are basically driven by development, but are small in comparison to the size of the overall need. A gap continues to widen between the existing base of revenues and the needs for funding.

7.6.1 Urban Services Financing

At present, municipalities in California are relatively limited in the number of options they have for raising revenue to meet capital facilities needs. Most available mechanisms are tied directly to growth, or to an increased cost of an "enterprise" service (e.g., water and sewer service), or for new or increased services within a defined sub area or special district.

Allocation of Public Services and Facilities Financial Burden

Public services and facility costs are typically allocated between three "need" categories: 1) existing, 2) growth, and 3) regional. Various types of services and facilities have different ratios of assigned costs between the three need categories. As an example, the use of a State Highway (SR-49) is used by more regional traffic than a local residential street. Funding sources vary between the "need" categories as well. The following is a brief description of potential funding sources that are available.

7.6.2 Existing Public Service and Facility Needs

Typically, existing public service and facility needs are addressed through the normal municipal budget process and can include funding from various funding sources including, but not limited to taxes, fees, intergovernmental transfers, interest income on deposited funds, etc. To fund shortfalls in existing facility and service need, there are several approaches that can be examined.

User Fees. User fees are one of the City's funding mechanisms that is not tied to development. Typically, some park and community facilities are subject to user fees as are water and wastewater services.

Inter-Governmental Transfers. State and federal funds, in the form of grants or some other form of ear-marked fund may become available to meet special community needs. The funds, however, are often earmarked for a specific service population (poor, elderly, etc.) or a specific purpose such as streets and highways, water/wastewater improvements, law enforcement, etc. Most of the time these funds are limited to facility development and/or improvement and cannot be used for operating or maintenance costs.

Redevelopment. Under state law, local governments can use the "tax increment" of a redevelopment area to assist in financing necessary public



improvements and provide some types of governmental services. The funds can only be applied, however, within a "Redevelopment" area or to projects that primarily benefit the "Redevelopment" area.

Taxes. Municipalities have the ability to impose new taxes (sales and property) subject to a super-majority voter approval (2/3rds).

General Fund. Existing "general" municipal revenues can be allocated to address deficiencies in public service for facility levels. Allocating the limited funds between competing demands is always one of the most difficult aspects of the local government budgetary process.

7.6.3 Growth Induced Public Service and Facility Needs

Growth in population creates new facility and service needs in a community. Typically, this growth is directly related to new development. Not all new growth can be directly linked to new development, however. In the case of increased family size, new growth can occur within the existing built environment. Some types of new development do not directly translate into new population growth such as industrial or commercial development. This is particularly true of industries or businesses that serve a regional population or draw from a regional labor force.

Another particularly nettlesome aspect of assigning burden to "growth" is the issue of "social equity". At a broad philosophical level, "new" growth is assigned a burden that was not applicable to "old" growth due to changes that have occurred in the tax laws in California. Traditionally, many of these "growth" impacts were financed through the general tax burden of a community and shared equally by all. Under the present system, "new" residents must pay a higher entry cost into a community than did their predecessors.

The issue of "growth" impact systems also create political problems for local communities with respect to assigning a level of burden. At the state level, the law mandates that the community maintain an "affordable" housing effort implemented through the programs established in the Housing Element of the City's General Plan. These programs have the potential to transfer "growth" costs to another economic segment of the community thereby raising the "affordability" threshold for the individuals above the "low-moderate" income brackets.

Additionally, "growth" impact fees must reflect the regional economic setting and effect all types of growth. Growth occurs from both people moving to a community (in-migration) and from people being born in a community (natural increase). If "growth" impact fees do not match the local or regional economic setting with respect to employment and income, a community can experience dislocation; older residents or families may be forced out of the local housing market and/or the local housing market may only be affordable to people moving into the area.

Typical sources of funding that can be used to address "growth" related public service and facility needs include:

Impact Fees. The development impact fee is the standard mechanism in California for recapturing development-related facility costs. Whether all costs



are indeed recovered with impact fees or with a combination of mechanisms, the fee is a useful tool for measuring the estimated cost of development on a standardized basis (typically the swelling unit or dwelling unit equivalent or DUE). Advantages of impact fees include their (1) straightforward benefit/burden structure, and (2) relative ease and low cost of administration. Potential drawbacks, however, include:

- Short-term volatility of fee income linked to development/construction/economic cycles,
- Lack of creditworthiness (fee revenues cannot be used to secure debt), and
- Lack of sensitivity to inflation (although they can be indexed to a CPI).

Another important limitation of impact fees is that they cannot be used to fund on-going costs of service operations and facility maintenance. Operations and maintenance typically need be linked to some sort of special district financing mechanism.

Dedications. Development can be conditioned to dedicate land and/or improvements as part of the development approval process. Dedications can include roadways, parks, open space, and major public facilities such as firehouses, libraries, schools, etc. Like impact fees, dedications do not address long-term service provision costs or the maintenance and operations of facilities.

Special Districts. The use of special districts is common on large development projects and a means of both financing public infrastructure and the paying the ongoing maintenance and operation costs of providing a public service. Special financing district can be useful tools for addressing development-related costs through the issuance of debt, particularly when funding is needed for costly facilities before development has commenced or sales have reached significant levels. Debt financing also permits the encumbrance of private property, something that is not possible with other development financing mechanism. While special districts can be an important tool in meeting the service and facility needs of growth, there are some limitations and drawbacks such as:

- The long-term administrative implications to a local government,
- The complexity of administering special districts, and
- The vulnerability of special district finance techniques to the political climate.

7.6.4 Regional Growth Impacts on Public Services and Facilities

Regional impacts of public services and facilities are fairly strait forward like highway traffic. Other regional impacts are not as clear-cut such as the local impacts of regional industrial or commercial development.

Inter-governmental transfers. Regional facility and service demands are typically met through regional service and facility providers such as the State of California or the County of Merced. Streets and highways are the most common types of facilities that provide regional services in the City.



Storm Water Pollutant Control Best Management Practices (BMP) Guidelines

There are a number of techniques that can be employed to improve the quality of urban runoff. The EPA, in conjunction with the Washington Metropolitan Water Resources Planning Board, has developed a handbook of Best Management Practices (BMPs) which can be used in several development applications. These BMPs are merely suggested as techniques that can be employed under appropriate circumstances. The following is a brief summary of the BMP technique and Table ____ describes the appropriate application.

Over the past two decades, a number of urban Best Management Practices (BMP's) have been developed and refined to mitigate some of the adverse impacts associated with development activity. At a minimum, the BMP plan should accomplish the following goals:

- a. Reproduce, as nearly as possible, the hydrological conditions in the stream prior to development.
- b. Provide a moderate level of removal for most urban pollutants.
- c. Be appropriate for the site, given physical constraints.
- d. Be reasonably cost-effective in comparison with other BMP's.
- e. Have an acceptable future maintenance burden.
- f. Have a neutral impact on the natural and human environment.

Appropriate BMP techniques include:

Extended Detention Ponds

Dry extended detention ponds rely primarily on settling to remove pollutants. Depending on how much and how long runoff is detained, it is possible to achieve moderate or high removal rates for particulate pollutants that are relatively easy to settle. However, removal rates for most soluble pollutants are quite low for dry extended detention ponds, although it is possible to enhance rates by incorporating biological removal mechanisms into the design of the pond (e.g., by establishing a shallow marsh in the bottom stage of a dry extended detention pond, or by using extended detention in combination with a wet pond).

Wet Ponds

Wet ponds have a moderate to high capability of removing most pollutants, depending on how large the volume of the permanent pool is in relation to the runoff produced from the surrounding watershed. Wet ponds utilize both settling and biological uptake, and are capable of removing both particulate and soluble pollutants. In addition to increasing the volume of the permanent pool, wet pond removal rates can be enhanced by establishing marshes around the perimeter, and by adjusting the geometry of the pond.

Infiltration Practices (trenches, basins, porous pavement)

From a pollutant removal standpoint, infiltration trenches, basins, and porous pavement behave in a similar manner, and can be treated as a group. Infiltration practices filter runoff through the soil layer, where a number of physical, chemical and biological removal processes occur. Infiltration practices have a moderate to high removal capability for both particulate and soluble urban pollutants, depending on how much of the annual runoff



Appendix: Best Management Practices-Storm Water Drainage.



Table PF A1
Comparative Pollutant Removal of Urban BMP Designs

		Percent Removal						
BMP/Design		Suspen- ded Sediment	Total Phos- phorus	Total Nitrogen	Oxygen Demand	Trace Metals	Bacteria	Overall Removal Capability
Extended Detention Pond								
Design No. 1 Design No. 2 Design No. 3		60-80%	20-40%	20-40%	20-40%	40-60%	N/A	Moderate
		80-100%	40-60%	20-40%	40-60%	60-80%	N/A	Moderate
		80-100%	60-80%	40-60%	40-60%	60-80%	N/A	High
Wet Pond								
Design No. 4 Design No. 5 Design No. 6		60-80%	40-60%	20-40%	20-40%	20-40%	N/A	Moderate
		60-80%	40-60%	20-40%	20-40%	60-80%	N/A	Moderate
		80-100%	60-80%	40-60%	40-60%	60-80%	N/A	High
Infiltration-Trench								
Design No. 7 Design No. 8 Design No. 9		60-80%	40-60%	40-60%	60-80%	60-80%	60-80%	Moderate
		80-100%	40-60%	40-60%	60-80%	80-100%	60-80%	High
		80-100%	60-80%	60-80%	80-100%	80-100%	80-100%	High
Infiltration Basin								
Design No. 7 Design No. 8 Design No. 9		60-80%	40-60%	40-60%	60-80%	40-60%	60-80%	Moderate
		80-100%	40-60%	40-60%	60-80%	80-100%	60-80%	High
		80-100%	60-80%	60-80%	80-100%	80-100%	80-100%	High
Porous Pavement								
Design No. 7 Design No. 8 Design No. 9		40-60%	60-80%	40-60%	60-80%	40-60%	60-80%	Moderate
		80-100%	60-80%	60-80%	60-80%	80-100%	80-100%	High
		80-100%	60-80%	60-80%	80-100%	80-100%	80-100%	High
Water Quality Inlet								
Design No. 10		0-20%	N/A	N/A	N/A	N/A	N/A	Low
Filter Strip								
Design No. 11 Design No. 12		20-40%	0-20%	0-20%	0-20%	20-40%	N/A	Low
		80-100%	40-60%	40-60%	60-80%	80-100%	N/A	Moderate
Grassed Swale								
Design No. 13		0-20%	0-20%	0-20%	0-20%	0-20%	N/A	Low
Design No. 14		20-40%	20-40%	20-40%	20-40%	0-20%	N/A	Low



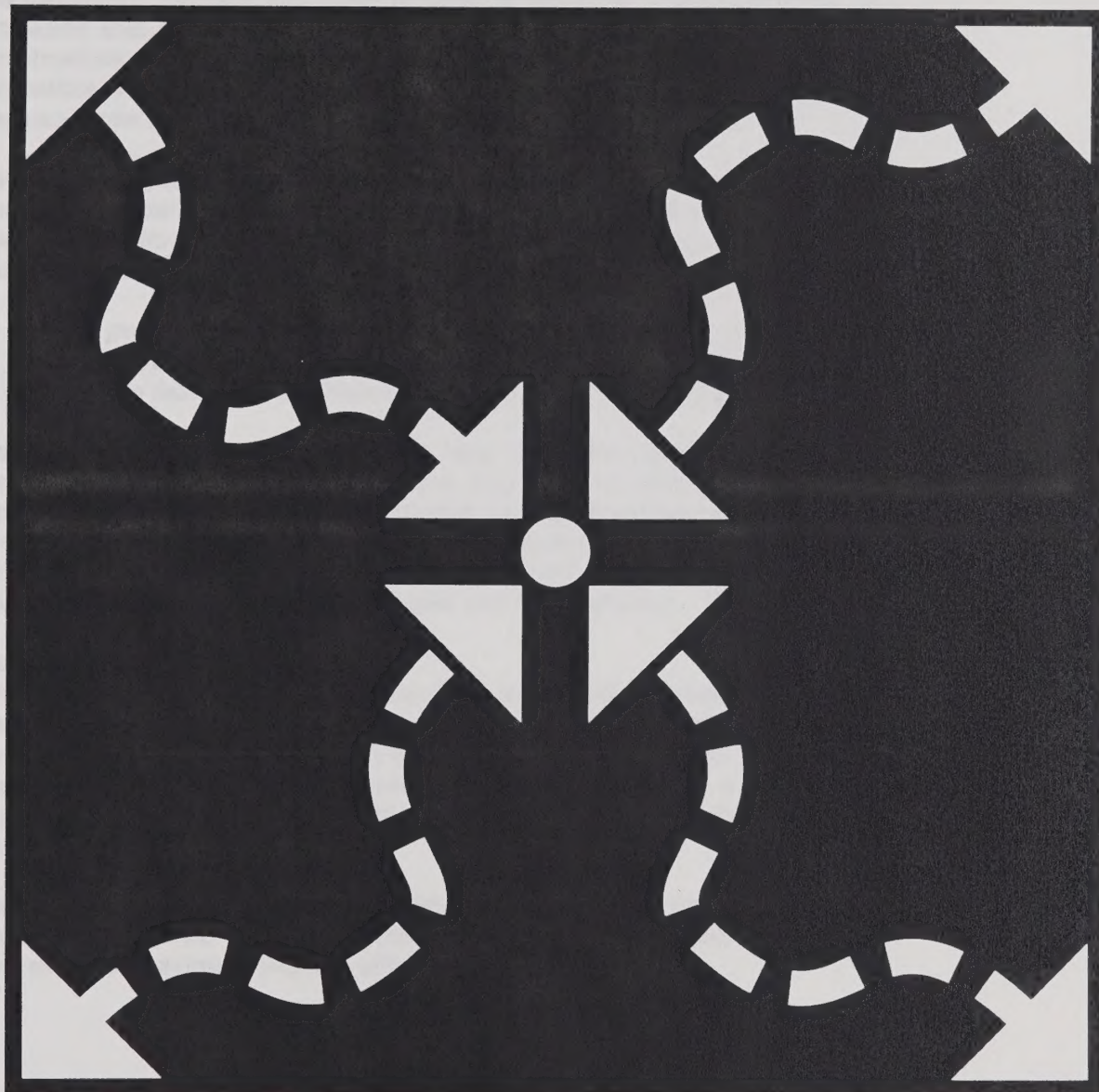
Public Facilities

- Design No. 1 First-Flush runoff volume detained for 6-12 hours.
Design No. 2 Runoff volume produced by 1.0 inch, detained 24 hours.
Design No. 3 As in Design No. 2, but with shallow marsh in bottom stage.
Design No. 4 Permanent pool equal to 0.5 inch storage per impervious acre.
Design No. 5 Permanent pool equal to 2.5 (Vr); where Vr=mean storm runoff.
Design No. 6 Permanent pool equal to 4.0 (Vr); approximately 2-weeks retention.
Design No. 7 Facility exfiltrates first-flush; 0.5 inch runoff/impervious acre.
Design No. 8 Facility exfiltrates one inch runoff volume per impervious acre.
Design No. 9 Facility exfiltrates all runoff, up to the 2-year design storm.
Design No. 10 400 cubic feet wet storage per impervious acre.
Design No. 11 20-foot wide turf strip.
Design No. 12 100-foot wide forested strip, with level spreader.
Design No. 13 High slope swales, with no check dams.
Design No. 14 Low gradient swales with check dams.

Source: Controlling Urban Runoff: A Practical Manual for Planning & Designing Urban BMPs. 1987.

CHAPTER 7

TRANSPORTATION & CIRCULATION





Introduction and Intent

The Circulation Element is a required component of the Gustine General Plan. This Element presents goals and policies that coordinate the transportation and circulation system with planned land uses; promote the efficient movement of people, goods and services within the Sphere of Influence utilizing the existing system to its fullest extent. In addition, this Element also plans for practices that will improve the quality of the environment of Gustine. It is intended to guide the development of the City's circulation system in a manner that is compatible with the Land Use Element and other Elements of this General Plan.

The Circulation Element has been devised to create an overall blueprint of circulation that works well with planned land uses as well as the existing infrastructure system. In addition, the Circulation Element is designed to be compatible with the various elements of the General Plan and responds to the land use, open space, and conservation goals of the city.

State law recognizes that circulation and land use are especially related and emphasizes a definite correlation between these two required General Plan Elements. California Government Code Section 65302 requires Circulation Elements to identify:

"...The general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the Land Use Element..."

The goals and policies presented here are intended to coordinate transportation/ circulation with land use and other pertinent areas of the general plan, while promoting the efficient movement of people, goods and services within the Gustine area. The overall public benefit is twofold. The public enjoys a broader choice of realistic options for circulating through the urban area. Secondly, their trips are easier and more efficient.

Scope

Build-out of the General Plan will result in an estimated population of 12,000. The proper designation of the community's street network can assist in the development of an efficient system for both mobility and access. The proper balance ensures street sizing that functions properly and allows a community to properly allocate its resources to the streets needing additional capacity improvements.

Gustine's General Plan relies on a variety of transportation modes, including passengers, vehicles, truck, pedestrian, bicycles, rail, and transit. Each mode must allow for maximum use and efficiency.



Transportation and Circulation Goals, Policies and Actions

Whenever transportation issues are discussed some common issues arise:

1. City street and road improvements must be planned and constructed to accommodate growth and safety.
2. A sidewalk plan that provides safe and convenient access to commercial facilities, and residential areas, must be adopted.
3. The provision of safe and convenient commercial parking facilities needs constant attention from City officials and downtown merchants.
4. Public transportation that will meet the needs of the community should be pursued and supported.
5. Infrastructure installation, and storm drains in City streets and State highways demand constant attention from community officials to insure coordinated street improvements and best use of public right-of-ways.
6. Development of pedestrian and biking trails through sections of the City should be pursued.
7. Establish a Transportation Systems Management Plan (TSM) or develop programs that will reduce dependency on the automobile.

Goals and Policies

Based on these concerns and the preceding transportation and Circulation discussions, the following Goals, Policies and Implementing Actions are proposed.

CIRCULATION

Area: Streets and Roads

Efficient movement of goods and people throughout the City.

- A Circulation system with a maximum degree of safety.
- A circulation system which provides for the safe and efficient movement of people and goods throughout the City, while being aesthetically pleasing.
- A circulation system which provides for a variety of transportation modes.

Policies

- Preserve rights of way needed for highway improvements through dedication or acquisition of properties adjacent to the transportation route.
- Require new developments to pay for their fair share of the cost to obtain right of way and construct the road plan of the circulation element.
- Allow for the construction of a bypass of 140 extending from Sullivan Road to Kniebes Road and Kniebes Road to Highway 140.
- Strive for consistency between the Circulation Element of the Plan and the requirements of the Clean Air Acts.
- The Circulation system shall be designed to minimize the noise impacts on sensitive land uses and traffic congestion which would increase the rate of vehicle emissions.
- arterial, collector, and local street standards shall be developed to provide adequate capacity for their appropriate function, and shall be incorporated into Subdivisions standards.
- Actual design and improvements to ultimate standards shall be achieved through inclusion of facilities as part of the City-wide Capital Improvement Program, or by developers as areas adjoining



the designated circulation system are developed, with allowance for bicycle lanes and facilities where planned.

- The City designates level of service C as defined in the Highway Capacity Manual as the minimum desirable level of service at which arterial and collector streets should operate. All new facilities in this category should be designed to operate at this level or better for a period of at least 20 years following their construction.
- Right of way essential to the circulation system should be dedicated and/or developed to the appropriate extent and width when a zone change to a greater density, division of property or development occurs. The City shall have Merced County apply the same requirements within Gustine's Sphere of Influence.
- City circulation system street alignments shall be coordinated with Merced County circulation system alignments.
- No development shall be approved unless it is found to be consistent with the adopted Circulation Element and policies of the General Plan and with the Circulation Element.

Arterials

The primary purpose of arterials is to carry traffic. Parking should be discouraged on such streets and eliminated where it now exists, along existing arterials as traffic safety conditions warrant.

Arterials shall be built in areas where traffic demand warrants the development of this facility to meet the adopted level of service standard.

Collectors

Intersections of and by arterials and collectors shall form four-leg, right angle intersections. Offset or skewed intersections of streets shall be avoided where possible.

Local Streets

Local streets shall serve residential neighborhoods and shall not be used for high traffic volumes.

Goods Movement

Safe and efficient transport of goods.

Heavy traffic to commercial centers will be routed only on arterial and collector streets.

Adequate access to busy destination points such as commercial and industrial centers, recreational sites, and employment centers shall be provided and planned in advance of development.

Pursue expansion of industrial facilities that will use railroad freight services.

Residential subdivisions shall be designed to encourage access from collectors.

Actions

- Work closely with the California Department of Transportation and MCAG to prioritize the bypass of Highways 140/33.
- Develop and implement Capital Improvement Program.

**Area: Pedestrian and Bicycle**

- Provide adequate, safe, well maintained, and efficient access to employment, educational, commercial, and recreational uses throughout the community.
- Safe and efficient bicycle environment that emphasizes connectivity *and* recreation throughout the City.

Policies

- Maximize traffic safety for automobiles, transit, bicycles, and pedestrians.
- Street landscaping, monuments and sign controls on streets serving as gateways to the City, in particular both junctions of Highways 140 and 33.
- Achieve a balanced transportation system.

Actions

- As railroad right of way becomes available, acquire for pedestrian and bicycle use.
- Use canal easements to provide bicycle and pedestrian trails.
- Improve handicap access throughout the older sections of town where handicap ramps are not installed.

Policy

Sidewalks, paths, and appropriate crosswalks should be located to facilitate access to all schools and other areas where there is significant pedestrian traffic.

Actions

- The City shall continue to require curb, gutter, and sidewalks to accommodate pedestrian traffic.

Bicycle

Bike lanes are on street bikeways where separate bicycle lanes are designated by signs and street markings. Bike lanes shall be implemented on new improved streets or new roadway segments.

Bike routes are a system of streets with signs denoting them as a bike route, warning motorists to anticipate bicycles on these streets and to indicate a desirable bike route. Bike routes will be implemented on existing street segments.

Bike paths have their own right of way and are developed exclusively for bicycle and pedestrian travel.

Secure bicycle parking facilities shall be required as conditions of approval for all new major activity centers, public and private places of assembly, and commercial or industrial developments which must provide at least twenty parking places.

Area: Maintenance

Provide for the development and maintenance of the community's transportation infrastructure.

Policy

The city shall maintain a high level of inter-governmental coordination in the transportation planning process.



Maintaining the existing infrastructure system is of high priority to the City.

The City shall maintain a high level of intergovernmental coordination and citizen participation in the circulation and transportation planning process and work with other agencies to insure that regional transportation plans are consistent with the City's General Plan.

Develop, maintain, and update a 5-year Capital Improvement Program that identifies and provides adequate sources of funding for both maintenance and improvement of the street system.

Area: Parking

Off street parking shall be required of medium and high density residential land uses to accommodate tenants. A parking ratio of 1 parking space per bedroom shall be the standard for multi-family residential areas.

Parking areas in medium and high density residential areas shall also conform to the City's parking design standards.

Parking standards shall be evaluated to assess the potential for offering reduced parking requirements to development that incorporates measures proven to reduce commute or customer trips.

Provide adequate parking areas at activity centers along major arterials.

Parking of commercial vehicles with a weight rating of 10,000 pounds or more shall be prohibited on streets or building sites in residentially zoned districts.

AREA: PUBLIC TRANSPORTATION

The City shall encourage the development of truck terminals within the City to reduce truck parking along major thoroughfares.

Support the range of fixed route and demand responsive public transit services provided by Merced County Transit and Stanislaus County Transit which offers safe and affordable transportation.

Continue to search for new and innovative alternatives that will provide an efficient transit system

Require transit improvements at all sites deemed appropriate and necessary by the MCAG and Caltrans which are consistent with long range transit plans.

Transit centers shall be established to encourage the interface between commercial centers, high density residential uses, and the transit system.

Encourage and provide for ride sharing, park and ride, and other similar commuting programs.

AREA: Air Service

Safe and efficient facilities that attract out of town guests to use the airport facility.

**Policy**

The City shall continue to seek grant funding for the maintenance and improvement of airport facilities.

The City shall continue to keep its Airport Master Plan updated.

AREA: Pedestrian Facilities

Sidewalks, paths, and appropriate crosswalks should be located to facilitate access to all schools and other areas with significant pedestrian traffic.

The City shall require curb, gutter, and sidewalks in all areas of the community to accommodate pedestrian traffic, especially along routes with high pedestrian traffic.

The City shall promote safe, convenient and accessible pedestrian ways within the community.

Require street lighting within the rights of way of all public streets.

Circulation Planning

People continue to drive more. Vehicle miles of travel and the number of automobiles registered per person have continued to increase throughout the State. Shifts in employment patterns and other factors have concentrated auto use during peak daily use periods. This has special implications for an area like Gustine.

Coordination of Land Use and Circulation

Specific goals and policies linking land use to transportation/circulation concerns are found in various locations within this plan, including the Land Use Chapter.

This Chapter and its Goals, Policies and Implementation Actions are coordinated with the land use element in the following manner:

1. The Circulation element is based on population projections that are also used in the Land Use Element projections of future population and economic growth.
2. Projections of future travel demands are based upon the land use element distribution of future population and economic activity.
3. The circulation plan and policies are designed to support the land use plan, maps, objectives and policies that emphasize city-centered development and limited growth outside City sphere of influence.

The location and intensity of development has an effect on traffic levels in the surrounding area and on the City as a whole. Transportation engineers have developed several mathematical tools to monitor the relationship between land use and the transportation system. One tool is the traffic-forecasting model. This model forecasts traffic volumes and simulates traffic conditions under future land use scenarios based on a) estimates of traffic which will be generated by new development; b) streets the traffic will use; c) and the amount of new traffic the street system can ultimately accommodate.

Several traffic models have been developed to analyze the circulation system in and around the City of Gustine. This Chapter relies primarily on the model



Circulation

developed by the Merced County Association of Governments. The study projects traffic capacity through the year 2020 based on assumptions of growth and land use that are part of the adopted policy of this General Plan. This study contains traffic projections and Level of Service projections for major roadways and intersections within the City's Sphere of Influence (Planning Area).

The resulting roadway level of service capacity is summarized in *Table C-1*. The financing of the proposed circulation system improvements is discussed in Chapter PF, Public Facilities and Services. The resulting Circulation Plan (map) is shown in *Figure C-2*

The transportation system outlined in this Circulation Element recognizes the likely limitations of funding as well as the growth inducing potential of excessive roadway capacity in areas not planned for growth. The Circulation Element includes a plan for future transportation facilities that will:

- 1) help accomplish the planned pattern of future land uses,
- 2) serve the needs of all population groups and enable transport of goods and materials, and
- 3) contribute to environmental quality and achieve environmental goals.

Major considerations in the plan policies are the efficient use of existing facilities, the high cost of improvements and the critical need to study possible State Highway improvement on the SR-33/140 corridor along with a possible bypass for this segment of roadway.

Coordination of Circulation System Planning

Coordination between various transportation planning agencies is an important method of managing traffic growth as well as local and regional traffic problems. It is important that land use and transportation/ circulation policies be carefully coordinated on a regional level. This offers the best possible opportunity for achieving consistent comprehensive planning including a well-balanced jobs to housing relationship, which in turn can reduce the length and number of commute trips in the City's urban area.

The Merced County Association of Governments (MCAG) is County's regional (countywide) planning agency, responsible for coordinating circulation planning with the State. MCAG, through a governing board a) assesses regional transportation needs; b) establishes related transportation priorities; c) provides regional transportation planning; and d) administers regional programs.

Elements of the Transportation System

A transportation system utilizes many elements. Traditional transportation planning has focused on one primary mode of transportation; the motor vehicle. The primary focus of the transportation planning for the City of Gustine is to accommodate the automobile, truck and bus. Modern transportation planning concepts recognize the inter-connectedness between various modes of transportation. The following discussion addresses these individual elements of the total system.



Public Transportation Services

The City of Gustine and the surrounding areas are served by two public transportation organizations. Merced County Transit, The Bus, operates Merced's Regional transit system. There are no direct fixed routes in Gustine, however connections can be made in Los Banos through the Dial A Ride system. The Dial A Ride service requires a telephone call or other service request from a customer to the transit dispatch center. Transit service is then radio dispatched within a reasonable period of time to the customer within 30 minutes of the pickup request. Every route is provided with wheel chair access.

Private Transportation

The future of private transit operators (taxis, vanpools, etc.) is difficult to predict because of the volatile nature of the business in recent years. Changing market forces and state and federal government regulations will influence future service levels of inter-city transit. Demand for service to and from the Gustine area can be expected to increase. With increasing demands brought about by air quality and congestion management, the private inter-community operations in Merced County and the San Joaquin Valley may be expanded. It should be noted that if the private sector is unable to respond to this commuter demand, some of the demand could shift to the public sector.

The major portion of Merced County employment is centered in Merced and along the Highway 99 corridor to the east. At the same time, Gustine and other communities along the I-5 Corridor and Highway 33 provide affordable housing for workers in the Livermore Valley/Bay area to the northwest and San Jose/Santa Clara County to the southwest.

Consequently, some car and vanpools utilize Gustine as a destination. Efforts to provide parking for car and vanpools will encourage additional usage. Any effort that results in the reduction of traffic congestion and parking demands will assist the City. Major groups within the City that may need additional assistance with public transportation are senior citizens, the physically handicapped, and the developmentally disabled.

Rail Service

The California Northern Railroad line runs through Gustine, adjacent to Highway 33/140. The line runs north to Tracy, with east-west connections, and south to Los Banos, with multiple rail connections. An average of one to two trains daily pass through Gustine.

The relatively minor traffic involved poses only occasional problems of traffic congestion when trains block major intersections. Not all crossings are protected by automatic signals and guards. Further development in the City should be required to participate in the funding of signals along the railroad corridor.

An AMTRAK passenger train station is located in Merced, about 30 miles east of Gustine. Trains run three times daily in each direction up and down the San Joaquin Valley. Major destinations include Fresno, and Bakersfield to the south (with bus connections to Los Angeles from Bakersfield) and Stockton, Antioch, Martinez, and Oakland to the north, with bus connections in Stockton to Sacramento and San Jose.

**Parking**

Just as levels of service are important for maintaining free vehicular movement, so too are terminals (off-street parking) for providing adequate space to stop and conduct business. The reduction of curb side parking also improves the free flow of traffic. A parking problem already exists in downtown Gustine and with the addition of 8206 more people by the year 2010, problems will multiply.

Parking facility development must address current demand and shopping convenience in addition to the need for visitor and bus parking. Parking standards should be continually evaluated to ensure that new development does not create additional parking problems.

Community off-street parking has been provided as new commercial buildings have been constructed. This requirement should be continued and revised if it is found that insufficient spaces are being required for particular types of uses.

Maintenance

The City has several road maintenance projects which it has identified in the Regional Transportation Improvement Plan. The City does not yet have a pavement management system (PMS), consistent with the California Streets and Highways Code but is working to implement one (refer to Figure 10). A PMS is a program set up by the City to ensure that local streets are adequately maintained. This is accomplished by assessing street conditions and scheduling maintenance based on assessment findings. The program also includes budgeting and identifying financial sources for improvements.

Bicycle Circulation System

In the future, bicycles have the potential to become an important mode of transportation in the community. Gustine has both a favorable climate and terrain to encourage the use of bicycles for both recreation and transportation functions. As bicycle use increases, adequate facilities must be provided to furnish direct routes of access between destinations while minimizing conflicts with automobiles.

Bicycle facilities are categorized by the degree in which they separate bicycle movement from vehicular movement. There are two major types of bikeways: (1) off-street bikeways, and (2) on-street bikeways.

Based on the State Department of Transportation classification system, off-street bikeways should be Class I (Bike Paths or Bike Trails) whenever possible. Class I bike paths provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with cross flows by motorists minimized. Class I bike paths generally take advantage of creekside or canal locations and other non-street facilities. Although the off-street bikeways provide extensive recreational opportunities, another primary focus is on safe and efficient transportation linking major land uses and connecting with on-street bikeways at strategic locations.

On-street bikeways are intended to be Class II (Bike Lanes) whenever possible. Class II bike lanes provide a restricted right-of-way on the street for



the exclusive or semi-exclusive use of bicycles. Through travel by motor vehicles or pedestrians is prohibited, but cross flows by pedestrians and motorists are permitted.

The on-street bikeway system may use Class III (Bike Route) designations occasionally where Class II bike lanes are not feasible. Class III bike routes provide a right-of-way generally designated by signs and shared with pedestrians or motorists. Class III bike routes are to be avoided if possible and used only to connect or continue Class I or II facilities for short distances. On-street bikeways should utilize those existing or proposed major streets that provide the quickest, shortest, and safest route to take for bicyclists as well as motorists.

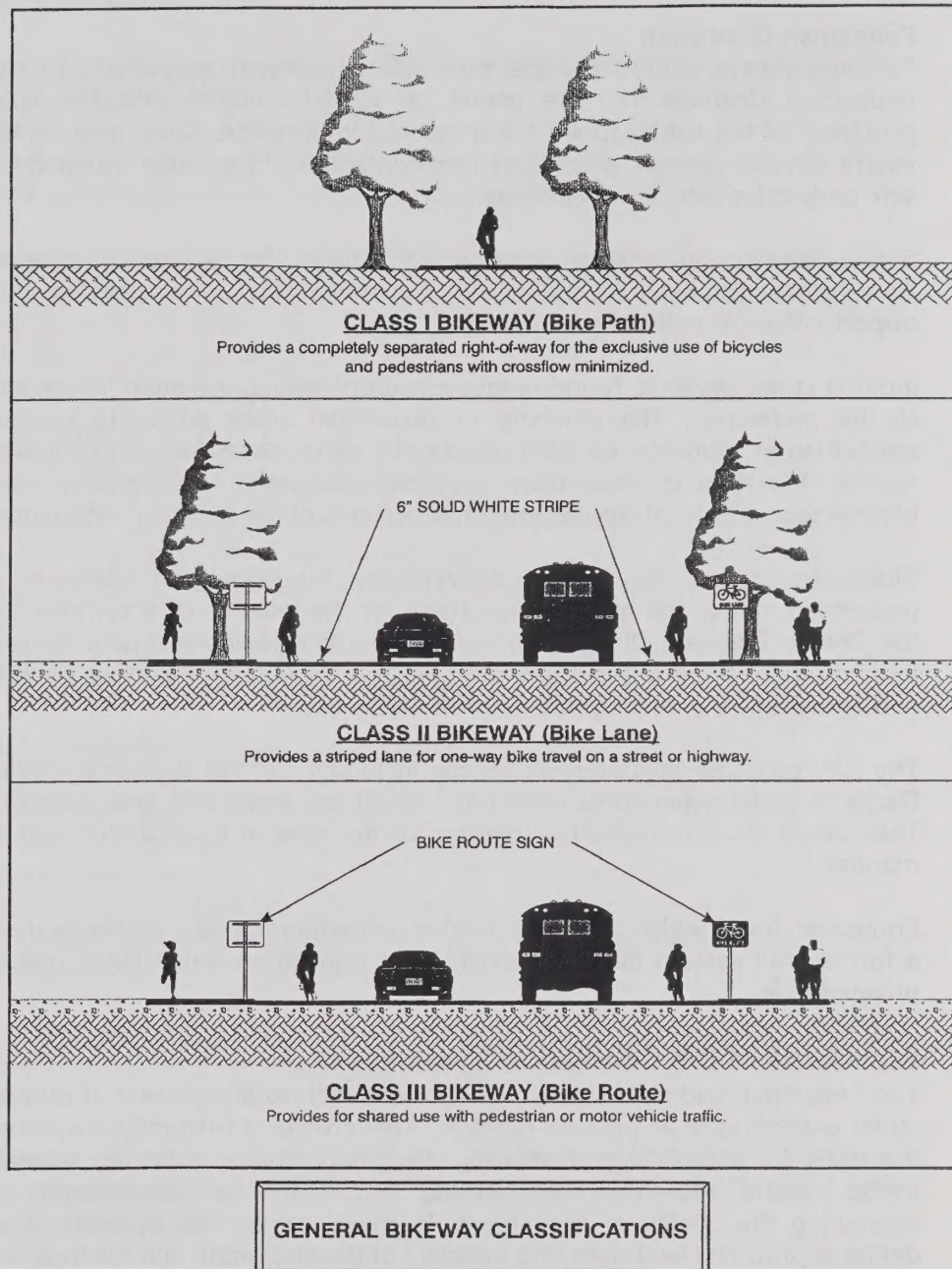
Truck Route System

Truck traffic on the regional road network and City streets is a major source of congestion and noise. Trucks provide the means for transporting commodities and raw material to and from local industries. The main truck routes in the City are along the Highway 33/140 corridor.

Conflicts between truck traffic and residential uses can be avoided by the design of the circulation system and designation of truck routes. The designation of truck routes from major regional arterials (State Highways) and local industries will minimize land use conflicts and support the City's growing industrial sector.



Figure C-1
City of Gustine
General Bikeway Classifications



Bicycle use of most existing major roadways within the City is hazardous due to inadequate width and due to roadway needs of maintenance and construction. It is not probable that roadway widening to meet the needs of cyclists will occur. Several roads are planned to be wide enough to provide for bike lanes should financing become available.



The potential for increased use of bicycles, should improvements encourage their use, needs attention to ensure that proper consideration is given to the development of bicycle paths that would link areas of traffic generation.

The City has adopted the Merced County Bikeway Plan and elements of that Plan have been incorporated into this Chapter.

Pedestrian Circulation

Pedestrian-ways should provide safe and convenient movement to major pedestrian destinations. The needs of school children and the special problems of the handicapped are of special importance. Care must be taken where development is phased or non-contiguous to provide adequate and safe pedestrian facilities at all times.

Both sidewalks and separate paths can be provided for pedestrian movement. As with bicycles, separate public easements or rights-of-way provide unique opportunities for pedestrian circulation.

Indirect street systems, found in modern subdivisions, are often inconvenient to the pedestrian. The planning of residential areas needs to recognize pedestrian movements, whether to schools, parks, shopping, or public transit routes. A system of pedestrian ways can also serve a secondary use as bicycle access to local streets and other portions of the bicycle path system.

Sidewalks provide safety and convenience by separating vehicular and pedestrian traffic. The most critical areas for the location of sidewalks are in the Central Business Districts and in areas where residential uses transition into commercial uses. It is important that the City maintain existing sidewalks and encourage the development of new sidewalks.

The City contains several scenic areas including Central California Irrigation District's Canal, wherein walking trails could be developed and maintained. This would allow increased enjoyment of the area in a controlled and safe manner.

Equestrian travel within the City provides recreation to many residents though a formal trail system does not exist. Most equestrian travel takes place on private lands.

Standards of the Circulation System

The functional road classification categorizes each existing street or proposed street according to its primary function. This creates a hierarchical system as the basis for establishing standards, designing streets, selecting necessary traffic control measures, establishing a priority for construction, and measuring the quality of movement. In many cases, this system will also define appropriate land uses, the intensity of development, and the location of public facilities. The City's classification system is based on functional categories used by County, Regional, State, and Federal agencies. The functional classification of streets and highways rests on the following concepts:



Circulation

- Streets and highways are classified into separate and distinct systems in accordance with their intended primary circulation purpose. Each system serves the movement of traffic and the access to property to a different degree.
- Street classification governs design standards and construction and improvement priorities.
- The City's circulation system must be coordinated with the networks of the State and County.
- All major streets and highways have continuity, logical termini, and adequate capacity to allow and provide a high quality of flow.

The functional classification system used in the Circulation Element and Map (*Figure 6.2*) divides all streets and highways into categories. These are illustrative characteristics only. Official design requirements are found in the City of Angel's Improvement Standards.

State Highway System

Two State Highways, Routes 33 and 140 provide access to Gustine. State route 33 bisects Gustine on a north-south axis. To the south SR 33 leads to the City of Los Banos and to the north is Newman, Patterson and Tracy. State Route 140, is an east-west route that brings in heavy traffic from Merced and western side of the San Joaquin Valley and SR-99 to SR-33 and I-5.

The Merced County Regional Transportation Plan classifies these two State Highways as minor arterials. Minor arterials are defined as follows:

Minor Arterials. This service classification provides a network of roads that are spaced throughout the County with the purpose of connecting community areas, traffic destination centers (such as recreation facilities and resources), and establish corridors to move traffic into and through the county. Traffic utilizing a minor arterial road tends to be a mix of through (inter-county), visitor or recreation (designation), and town to town (inter-county) traffic. All State Highways in the county are minor arterials.

Traffic volumes have been steadily increasing on SR 33 and SR 140. The increased usage is due to expanding commercial and regional traffic and local growth.

The primary traffic circulation problems of the City of Gustine stem from Routes 33, 140, and local traffic's joint usage of these facilities; the City's only north-south arterial.

City Streets

City and regional streets and highways are classified by categories that reflect their importance and function. Freeways are the highest level of roadway, with fully controlled access, high operating speeds and volumes, and highest design standards. Local streets and alleys are the lowest functional classification, with low speeds and volumes and direct access to adjacent property.



The accompanying tables (*Table 6.1 & 6.2*) summarize the characteristics of roadway categories. Specific design requirements are found in the City's Improvement Standards, which are amended on a regular basis.

Functional Classification System

Roadway characteristics and standards described in the Circulation Element apply to most common situations and generally should be considered as minimums. However, detailed traffic and design studies for specific development projects or roadway improvements may indicate that higher levels of improvements are required or that other standards may be permitted. Like other infrastructure, circulation improvements will be required as development occurs.

**Table C-1
City of Gustine
Summary of Functional Classification System**

CLASSIFICATION	FUNCTION	TYPES OF STANDARDS
Arterial	Carry large traffic volumes over long distances; county-wide or regional importance; connect major traffic operators	Number of travel lanes, driveway spacing, signalization, parking restrictions, right-of-way width, roadway width, and access control
Collector	Carry local area traffic to the arterial system	Number of travel lanes, sidewalks right-of-way width, roadway width
Minor Road	Provide access to property; carry local traffic	Road width, right-of-way and sidewalks

A proper balance of the road classifications set forth above will achieve a desired level of service for the community. Guidelines for the design of the various arterial roadway classifications is set forth in Table C-2:



Table C-2
City of Gustine
Summary of Street and Highway Standards

Roadway Classification	Right of Way Width	Pavement Width
Highway 4 & 49	80' - 100'	12' lanes 8' shoulder
City Arterial	80 ft.	12 ft. lanes 8' shoulder
Collector	60 ft.	12 ft. lanes 4 – 8 ft. shoulder
Local	40 – 50 ft.	12 ft. lanes 4 ft. shoulder

Standards in this table are considered to be guidelines that may be modified where warranted by site specific conditions or where Federal and State standards supersede. Appropriate traffic index and design speeds for various classifications of roadways are set forth in the City Improvement Standards and are subject to revision by resolution of the City Council.

Highways, Streets and Roads

Urban growth as characterized in the Land Use Element will result in significant levels of vehicular trips on City streets and roads. The following describes the City's circulation system.

1. Freeway

Freeways provide mobility between regions. Freeways provide for through traffic movement on a continuous route with no access to abutting property. Intersections with cross streets are by interchanges or grade separation structures.

Although not in the defined planning area, Interstate 5, 5-miles west of the City, is the only freeway serving Gustine. It is a major north/south connector providing access to services and supplies in neighboring cities and counties.

2. Arterial

Arterial streets are generally 4-lane routes constructed on right-of-ways of 80 to 100-feet wide. Major streets provide for through traffic movement on a continuous route joining major traffic generators such as other arterials, expressways, and freeways.

Arterial streets are:

- State Highway
- State Highway 140
- Sullivan Road and the extension of Sullivan Road, between State Highway 33 and Kneibes Road
-

3. Collector

Collector streets provide internal traffic movement within an area and connect local streets to the arterial road system. Collectors are normally two lane streets and access from adjoining property may be controlled. Most collector



streets are two lane roads with 60-foot right-of-ways, and are contained within local neighborhoods.

Collector Streets are:

- Fifth Street, between North Avenue and Carnation Road
- East Avenue/Hunt Road, between North Avenue/Highway 140 and Meredith Avenue
- North Avenue, between Jensen Road and East Avenue
- Jensen Road, between North Avenue and the intersection State Highway 33
- Kneibes Road, between the extension of Sullivan Road and Highway 140
- Linden Road and Linden Road extension, between North Avenue and Sullivan Road
- Lucerne Road, between Jensen Road and West Avenue
- West Avenue, between North Avenue and Sullivan Road
- Fourth Avenue and the extension of Fourth Avenue, between West Avenue and Kneibes Road
- First Avenue, between Fifth Street and Fourth Street
- Carnation Road, between Fifth Street and Kneibes Road

4. Local Street (Minor Street)

Local Streets serve as land access facilities. They constitute the largest part of the City's circulation system. Trip lengths are normally short and traffic volumes small. Local streets are 2-lane with 40-foot right-of-ways. Since these streets traverse internal residential areas, traffic volume, frequency of noise, and safety are very important issues to local residents. Often the quality of these streets may make the difference between a desirable or an undesirable neighborhood. The remaining balance of streets in the City is included in this definition and is not listed individually.

5. Alleys

Alleys also constitute transportation facilities in older neighborhoods. Alleys many times contain other public utilities and serve as limited access to rear yards and are sometimes used as refuse collection routes. Occasionally, alleys may be used as access to parking areas for higher density residential development. All dedicated alleys are included in this definition.

6. Truck Routes

Truck routes for through truck traffic for access to the industrial area are:

- Carnation Road
- Kneibes Road
- Highways 33/South Avenue
- Highway 140

7. Median Breaks and Driveway Standards

Median breaks and driveway standards for arterial, collector, and local streets directly affect the performance of these roadways, and the following minimum standards have been developed to properly facilitate the proper operation of these roadways:

Arterial Street Standards: Driveway access to major activity centers should be located no closer than 200-feet to the adjacent intersection of a collector or



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arterial street, measured from the curb return to the nearest edge of the driveway. If driveways must be provided near intersections for facilities (such as service stations) these driveways shall not be serviced by median breaks and shall be located no less than 50-feet from the intersection measured from the curb return to the nearest edge of the driveway. If more than one is required to serve a property, the driveways shall be separated by 50-feet measured edge to edge, not centerline to centerline.

Where practical and desirable, driveways should be located on adjacent collector streets rather than arterials. Driveway consolidation shall be encouraged through joint access agreements along arterials.

Collector Street Standards: Driveway access to major activity centers should be located no closer than 150 feet to the adjacent intersection of a collector or arterial street as measured from the curb return to the nearest edge of the driveway.

8. Scenic Highway Designations

There are no streets or highways in the planning area which meet the criteria for Scenic Highway Designation. State Highway 33/Fourth Avenue, State Highway 140, and Hunt Road are defined as "Roads of Regional Significance" by the Merced County Regional Transportation Plan Update, 1984.

Arterial Access Spacing

The prospective arterial system has two basic requirements if it is to be successful --1) adequate right-of-way (ROW) preservation to accommodate the amount of traffic expected from major future growth, and 2) strict access control to maintain efficient movement for this greatly expanded traffic.

In order for the street system to function properly, enough capacity must be built into the roadways to handle the traffic for the next 20 to 40-years and beyond. For that purpose, the rights-of-way (ROW's) for arterials need to be substantial.

Along with the amount of right-of-way, access control greatly affects street capacity. Every street has a maximum traffic-carrying capacity; the maximum number of vehicles that can be carried at a particular speed past any given point.

To maintain this capacity, speed must be maintained. Therefore, unnecessary disruptions to peak hour traffic flow must be avoided. Carefully controlling the number of intersections is the key to maintaining such roadway efficiency.

The locations at which streets intersect a major roadway, and the spacing or distance between such intersecting streets, are important factors affecting how well the major road fulfills its traffic carrying responsibility. The growth of traffic over time, along with accompanying disruptions such as increasing numbers of vehicle accidents, can significantly affect the efficiency of intersections.



Table C-3
City of Gustine
Summary of Street and Highway Access Standards

ROAD CLASSIFICATION	RIGHT-OF-WAY	# OF LANES	DRIVEWAY ACCESS RESTRICTIONS	STREET INTERSECTION SPACING	PARKING
Arterial-State Hwy.	80-100 ft	2-6	¹ Partial	1/6 - 1/2 mile	No
City Arterial	80 ft	2-4	¹ Partial	1/6 - 1/2 mile	No
Collector	60 ft	2	² Partial	As needed	² Permitted in Selected Areas
Minor Road	40-50 ft	2	No	As needed	Permitted

¹Generally no direct access to adjacent property. Right-turn-in/right-turn-out local streets or combined access driveways may be permitted at the City's discretion at 1/8-mile points.

² Fronting lots would be permitted on Collectors where a traffic analysis shows daily traffic volumes will not exceed 1,500 vehicles under ultimate conditions. Driveways or other direct access and parking are to be avoided if feasible within 300 feet of existing signalized intersection or an intersection with realistic prospects for future signalization

NOTE: These are general standards appropriate for most situations. Higher standards may be required or lower standards may be permitted based on detailed design studies. Expanded ROW's may be required at intersections to accommodate turn lanes. On-street parking may be deleted if adequate, convenient off-street parking is provided in a subdivision design.

Spacing is a critical element in any subsequent need for installing traffic signals. Effectively spaced traffic signals can be efficiently synchronized. This allows greater peak hour efficiency, with more vehicles traveling farther, and faster, during these problem periods. As spacing becomes less consistent, traffic signals can themselves cause disruption and be less effective for moving traffic.

Poor locations and/or spacing create problems that even signals will not be able to overcome. Proper distances involve one-eighth and/or one-quarter mile spacing for streets intersecting with divided and higher order arterials, and one-mile distances for streets intersecting with expressways.

Collector Design

"Collector" is a term describing, typically, a residential street that collects traffic from, and distributes traffic to, the local streets of a neighborhood. On a map a simple collector system might look like a group of smaller twigs connecting into a larger tree limb (the collector).

Ideally a residential collector serves as a simple conduit for local traffic. The collector carries such traffic to nearby attractors such as a shopping center, school, or community facility or to a major roadway (minor arterial, or larger street) for a longer trip within the City or beyond.



There are two major, and often conflicting, functions for residential collectors. This conflict creates a delicate balance. On the one hand, it is a residential street and as such is expected to fit into the quiet, safe setting of the surrounding neighborhood. On the other hand, a collector designed to efficiently fulfill its function of carrying traffic through and out of the area has potential for factors such as noise and speed which negatively impact the residential setting.

When neighborhoods become concerned about the impacts of a collector, they can create a strong lobby for imposing measures that will affect traffic flow, such as installation of stop signs. In some cases these may be generally effective within the larger street system. In other instances, such measures may simply force some traffic to find another route, which merely moves undesirable impacts to another neighborhood.

Growth and change can increase the role of existing collectors beyond their expected level of operation. These factors may also force the role of collector onto local streets not really designed as collectors.

Such streets often share similar characteristics, including substantial length, significant traffic destinations such as a major land use(s) or major roadway (often at both ends), and unimpeded access to such major destinations (a "straight-shot" traffic corridor with no real inconveniences to the motorists involved). These circumstances tend to make it convenient for traffic from beyond the adjoining residential areas to use these streets as 'through-ways' to get from one major destination to another, without the need of using an arterial or other major traffic carrier.

Other factors also contribute to neighborhood conflict with collectors. One involves subdivision design that forces local residents to back their automobiles out of residential driveways onto a collector. This disrupts traffic flow and increases the opportunity for accidents. Another factor is the conflict with parked cars. Parked vehicles have a natural tendency to slow collector traffic but also decrease visibility. Each creates an impact upon local residents and over time can create increasing tensions regarding collectors.

While there are residential driveway design options to avoid automobiles backing into traffic (circular driveways, hammerhead driveways, etc.), smaller lot sizes generally do not have sufficient room for such alternatives. A workable option, which has the added advantage of reducing the need for on-street parking, is to avoid fronting lots on collectors. On the other hand, such residential subdivision designs that orient lots only to side streets create limits on subdivision design flexibility which can reduce the overall number of lots obtained, while increasing the amount of streets.

An acceptable compromise is to avoid fronting residential lots on streets deemed "Major" Residential Collectors (500 vehicles per hour or more-*See Table C-5*). This would eliminate driveway and parked car conflicts with collector traffic on the most significant residential collectors.

Experience indicates that an important factor in neighborhood security can be the ability of neighbors to maintain surveillance on local activities. Design



features, such as open-end cul-de-sacs, would be important in allowing residents oriented away from Major Collectors to continue to observe local activities within the entire neighborhood.

Other residential streets are not major collectors but collect/distribute traffic in a more limited fashion. A likely point of conflict on such streets is the approach to its intersection with a major street. While a requirement preventing fronting lots along the entire length of such minor collectors might not be realistic, such a provision in the vicinity of main access points could reduce traffic conflicts for the entire neighborhood.

Circulation System Capacity

The measurement of the City's circulation system traffic capacity is the focus of this discussion. In the previous section, specific circulation system design standards (Functional Classes) were defined. These designs have a general capacity of traffic that can be modified by a number of factors; specifically access and parking are two major limitations to a street's capacity. As a roadway approaches its design capacity limits, the efficiency of that roadway as a "mover" of traffic, diminishes. A tool for measuring this efficiency is called "level of service".

Level of Service (LOS)

Level-of-Service (LOS) standards is one method for expressing how well traffic is moving on a road or through an intersection in relation to the capacity of that road or intersection. LOS ranks the quality of traffic movement on a scale of "A" through "F".

Often LOS is used to specifically describe "worst-case" situations, or traffic flow during "peak-hour" times. Typically, as in Gustine, there are three peak-hour periods (when the largest numbers of vehicles are on the road together) during the typical weekday, centered generally around 8:00 a.m., noon, 5:00 p.m., Friday afternoon, on weekends or during special events.

For use in determining LOS, traffic conditions are evaluated by numerous factors, including vehicle speed, travel time (how long it takes a vehicle to get a specified distance), volume and capacity (how many vehicles are on the road compared to how many vehicles the road can carry before efficient traffic flow begins to suffer), freedom to maneuver, traffic interruptions, and safety. Level of Service "A" represents free-flow conditions. Level of Service "F" reflects traffic jams -- that is, more traffic than the street has room for. These conditions are described in *Table C-4*.

Level of Service standards can be used to help analyze the potential impacts of prospective land use changes and growth to routes and intersections. When service drops below a particular level, a road segment or intersection can be considered deficient and in need of capacity improvements.

Level of Service is influenced by a number of factors. These include existence of on-street (curbside) parking, frequency and spacing of traffic signals, number and frequency of intersecting side streets and curb cuts, level of pedestrian activity, and existence of left-turn pockets and right-turn lanes.



Circulation

Ironically LOS "A," or the "best" condition in terms of freedom for an individual vehicle to move on a particular road segment, may not be best from other perspectives. LOS "A" indicates that a road has very little traffic on it in relation to how much traffic it could carry. Such a situation is appealing for a local neighborhood street. It could be very inefficient for a major street, though, indicating that the public might not be getting full value from that roadway.

At the other extreme, Level "F" means that the cost per vehicle using the roadway has been reduced. However, other costs to the drivers, such as large time delays, number of accidents, maintenance problems, air pollution levels, etc., all continue to increase.

The preferred LOS levels are typically "C" and "D," particularly for larger roads and major intersections. With LOS "C" the road provides stable operation but is still underutilized to some degree. LOS "D" represents a fine balance between the relatively large number of vehicles served and the generally an acceptable level of service.

It is the intent of the City's standards and policies for new and upgraded intersections and higher order (Arterial, etc.) road segments to be designed and built to function at LOS "D" ("tolerable delay"), at least, during peak traffic periods. In the interests of addressing long-term needs, however, LOS "C" or better is desirable on the Arterial system. The residential streets, including Collectors, should be planned to meet LOS "C" or better standards.

Maintaining a Level of Service "D" at existing intersections is not always feasible, appropriate, or necessary, however. People may expect and tolerate varying levels of congestion depending on location (e.g. Downtown Gustine) and time of day. Heavier traffic can also be a reason to encourage greater pedestrian activity and heavier transit use in such areas. Other factors may make higher levels of service infeasible. In Downtown Gustine, for example, widening existing streets could create great disruption to stable older neighborhoods and or the destruction of significant historic resources. In these areas, "significant delays" (LOS "E") or even LOS "F" may have to be acceptable at peak hours.

100	100	100
200	200	200
300	300	300
400	400	400
500	500	500
600	600	600
700	700	700
800	800	800
900	900	900
1,000	1,000	1,000
1,100	1,100	1,100
1,200	1,200	1,200
1,300	1,300	1,300
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10,000	10,000	10,000



Table C-4
Level of Service Traffic Description

Level of Service (LOS)	Traffic Condition
LOS "A"	Free flow conditions - Low volumes - High operating speed- Uninterrupted flow - No restriction on maneuverability-Drivers maintain desired speeds - Little or no delays
LOS "B"	Stable flow condition -Operating speeds beginning to be restricted
LOS "C"	Stable flow but speed and maneuverability restricted by higher traffic volumes - Satisfactory operating speed for urban conditions-Delays at signals
LOS "D"	Approaching unstable flow - Low speeds - Major delays at signals-Little freedom to maneuver
LOS "E"	Lower operating speeds -Volume at or near capacity - Unstable flow-Major delays and stoppages
LOS "F"	-Forced flow conditions -Low speeds -Volumes below capacity, may be zero -Stoppages for long periods because of downstream congestion

Level of service (LOS) is based on traffic conditions that have some subjectivity to them. In evaluating project impacts from increased traffic the LOS during peak hour movements is used. The approximate daily and peak hour vehicle capacities for various street classifications at levels of service "C" and "D" are set forth in *Table C-5*:

Table C-5
Approximate Peak Hour (60 Minutes) Maximum Vehicle
Capacities at Levels of Service "C" and "D"
(Vehicles per Hour in Heavier Direction)

Type Facility	Capacity @ Level of Service	
	"C"	"D"
Rural Road 2 L, good geometric* 1 L	1,000 100	1,200 120
<i>Residential Street</i> 2 L	80	140
<i>Collector</i> 2L Major 3L Major 2L Minor	500 650 400	560 800 450
<i>City Arterial</i> 2L 4L	700 1,500	780 1,680
<i>Arterial (State Highways)</i> 2L 4L	900 2,000	1,010 2,240

*Consistent with "A Geometric Design of Highways and Streets" by the American Association of State Highway and Transportation Officials.

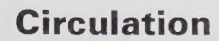


Table C-6
Approximate Daily Vehicle Capacities
At Levels of Service "C" and "D"
 (Total for all lanes, both directions)

Type Facility	Level of Service "C"	Level of Service "D"
Rural Road		
2 L good geometric*	5,000	5,600
1 L	1,200	1,400
Residential Street 2 L	1,200	1,400
Collector		
2 L Major	7,000	8,000
3L w/2way left turn lane (major)	10,000	11,000
2L Minor	5,000	5,600
City Arterials		
2 L	10,000	11,300
4L	20,000	23,000
3L w/2-way left turn lane	14,000	15,700
Major Arterials (State Hwy's)		
2 L	12,000	13,500
4L	22,000	25,000

*As per the current text of "A Policy on Geometric Design of Highways and Streets" by the America Association of State Highway and Transportation Officials.

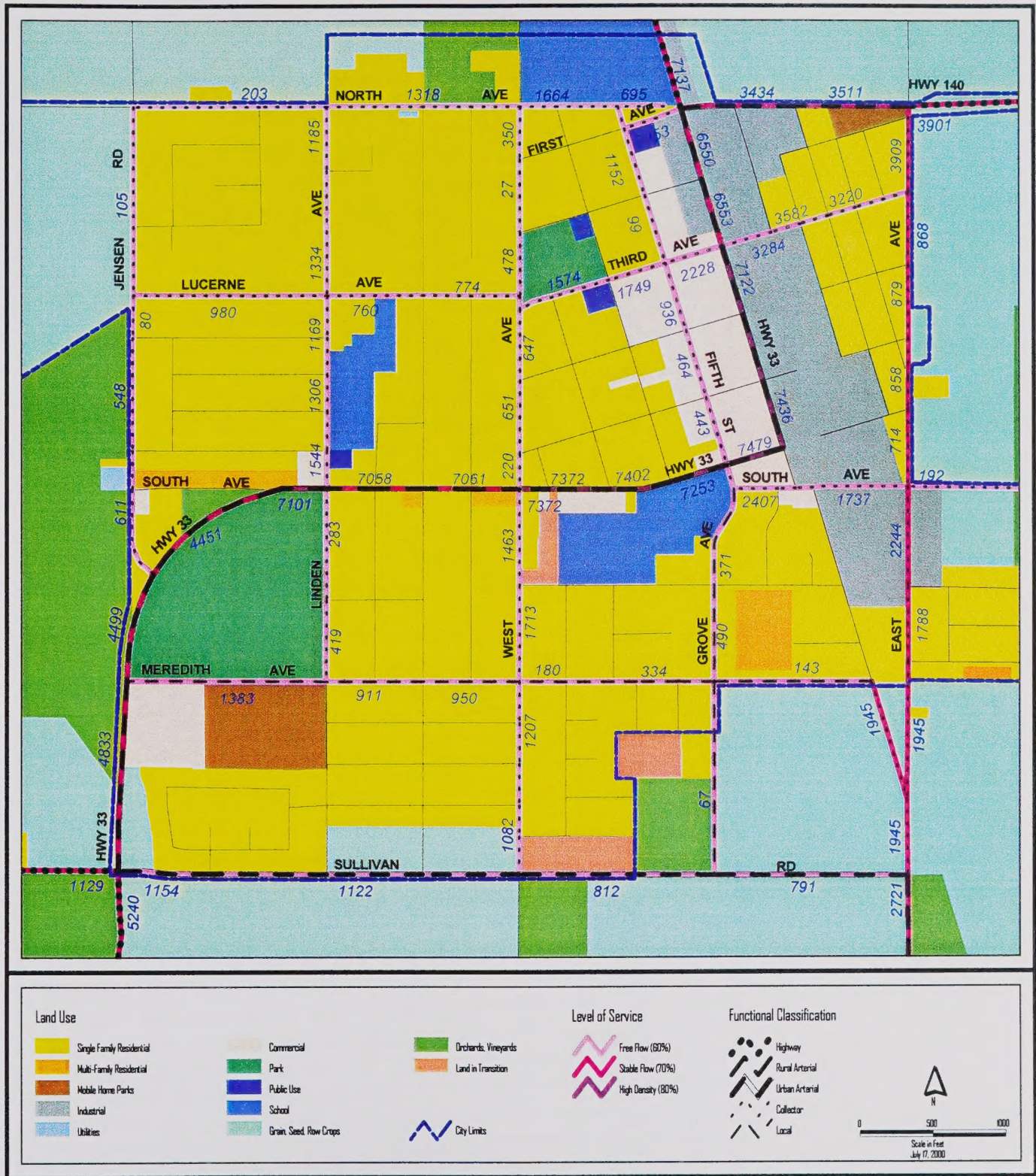
The overall planned improvements of the overall circulation system have been evaluated in terms of gross capacity (average daily traffic or ADT) and level of service. The results of that evaluation are contained in **Table C-7** of this document.



Circulation



Figure C-2: City of Gustine - Circulation Plan







**Table C-7
City of Gustine Circulation System
Projected Future Condition
Level of Service**

# on Map	Street Name - From, To	2020 Traf.	2020 LOS
1	HIGHWAY 140/SULLIVAN RD - FROM PRINCE AV TO HWY 33	12,900	D
2	HIGHWAY 33 / FROM BORBA RD TO HWY 140/SULLIVAN RD	15,600	D
3	SULLIVAN RD - FROM HWY 33 TO LINDEN AVE	8,900	D
4	SULLIVAN RD - FROM LINDEN AVE WEST AVE	8,800	D
5	SULLIVAN RD - FROM WEST AVE TO GROVE AVE	8,400	D
6	SULLIVAN RD - FROM GROVE AVE TO HUNT RD	10,300	D/E
7	SULLIVAN RD - FROM HUNT RD KNIEBES RD	3,600	C
8	KNIEBES RD - SULLIVAN RD TO CARNATION RD	4,100	C
9	KNIEBES RD - FROM CARNATION RD TO HWY 140	4,900	C
10	HIGHWAY 140 - FROM KNIEBES RD TO SANTA FE GRADE	9,600	C
11	HIGHWAY 33/140 - FROM SULLIVAN RD TO MERRIDITH AVE	11,100	F
12	HIGHWAY 33/140 - FROM MERRIDITH AVE TO JENSEN RD	9,400	D
13	HIGHWAY 33/140 - FROM JENSEN RD TO LINDEN AVE	7,300	D
14	HIGHWAY 33/140 - FROM LINDEN AVE TO WEST AVE	7,400	D
15	HIGHWAY 33/140 - FROM WEST AVE TO GROVE AVE	7,900	D
16	HIGHWAY 33/140 - FROM GROVE AVE TO 3RD AVE	13,800	F
17	HIGHWAY 33/140 - FROM 3RD AVE TO HWY 140	19,000	F
18	HIGHWAY 33 - FROM HWY 140 TO NETHERTON RD	38,500	F
19	JENSEN RD - FROM HWY 33/140 TO LUCERNE AVE	2,300	C
20	JENSEN RD - FROM LUCERNE AVE TO NORTH AVE	600	C
21	JENSEN RD - FROM NORTH AVE TO BAMBAUER RD	200	C
22	HUNT RD - FROM NOBLE RD TO HWY 140	5,700	C
23	HUNT RD - FROM HWY 140 TO MERIDITH AVE	5,800	C
24	HUNT RD - FROM MERIDITH AVE TO SOUTH AVE	7,800	C
25	KNIEBES RD - FROM SOUTH AVE TO HWY 140	7,700	C
26	NORTH AVE - FROM JENSEN RD TO LINDEN AVE	2,700	C
27	NORTH AVE - FROM LINDEN AVE TO WEST AVE	4,500	C
28	NORTH AVE - FROM WEST AVE TO HWY 33	5,100	C
29	LUCERN AVE - FROM JENSEN RD TO LINDEN AVE	2,800	C
30	LUCERN AVE - FROM LINDEN AVE TO WEST AVE	1,500	C
31	MERIDITH AVE - FROM HWY 33/140 TO LINDEN AVE	1,800	C
32	MERIDITH AVE - FROM LINDEN AVE TO WEST AVE	100	C
33	MERIDITH AVE - FROM WEST AVE TO GROVE AVE	800	C
34	MERIDITH AVE - FROM GROVE AVE TO HUNT RD	200	C
35	3RD AVE - FROM WEST AVE FIFTH ST	3,400	C
36	3RD AVE - FROM FIFTH ST TO HUNT RD	4,500	C
37	CARNATION RD - FROM GROVE AVE TO HUNT RD	7,600	C
38	CARNATION RD - FROM HUNT RD TO KNIEBES RD	1,200	C
39	HIGHWAY 140 - FROM SECOND AVE TO EAST	9,700	D
40	HIGHWAY 140 - FROM HWY 33 TO EAST AVE	12,800	E
41	HIGHWAY 140 - FROM EAST AVE TO KNIEBES RD	7,000	C



Circulation

42	FIFTH ST - FROM NORTH AVE TO 3RD AVE	1,300	C
43	FIFTH ST - FROM 3RD AVE TO SOUTH AVE	2,600	C
44	LINDEN AVE - FROM MERIDTH AVE TO SOUTH AVE	1,200	C
45	LINDEN AVE - FROM SOUTH AVE TO LUCERNE AVE	2,600	C
46	LINDEN AVE - FROM LUCERNE AVE TO NORTH AVE	3,300	C
47	WEST AVE - FROM HWY 140 TO MERIDTH AVE	1,900	C
48	WEST AVE - FROM MERIDTH AVE SOUTH AVE	1,600	C
49	WEST AVE - FROM SOUTH AVE TO 3RD AVE	700	C
50	WEST AVE - FROM 3RD AVE TO HWY 140	700	C
51	GROVE AVE - FROM HWY 140 TO MERIDTH AVE	3,100	C
52	GROVE AVE - FROM MERIDTH AVE TO CARNATION AVE	3,500	C

Transportation System Management (TSM)

The goal of transportation systems management is to reduce the use of the motor vehicle that is currently the most heavily used method of transporting people and goods. It also includes methods of more effective use of the present roadway system. Elimination of on-street parking and replacement with off-street parking facilities can increase the capacity of existing streets. Intersection improvements and signalization can improve LOS at intersections.

In rural areas such as Merced County the dependence on the automobile for personal transportation to and from work and shopping is more pronounced than in a metropolitan area such as the San Francisco Bay Area, Sacramento or Stockton. Public transportation is only cost effective in those areas with a relatively high density of population. As the population of the County continues to grow, some form of transit in addition to the present specialized services may be practical.

General TSM Strategies:

The TSM Alternatives represent the best that can be done for mobility with existing infrastructure -- that is, without construction of major new transportation facilities. Generally, the TSM Alternative emphasizes small physical improvements and operational efficiencies -- intersection improvements, minor widening, focused traffic engineering actions, contra-flow lanes for carpools and buses, expanded bus service, transit centers, and improved access to transit services.

The Guidelines go on to state that given the crucial role of the TSM Alternative as both a realistic near-term package of improvements and a rational baseline for evaluating the major transportation improvement projects such as the SR 4 and 49 bypasses, it deserves significant attention in its definition and refinement. The proposed scope of TSM solutions is an initial step in this evaluation. Operationally, TSM is broken into sub-program areas known as TDM, TCM and TSM in this report.



Within this Chapter, these non-capacity enhancing transportation strategies are classified under three program areas:

- ❖ Transportation Demand Management (TDM),
- ❖ Transportation Control Measures (TCM), and
- ❖ Transportation System Management (TSM).

The traditional approach to transportation planning uses a combination of all three programs to manage the vehicular flow on the City's streets and the State Highway system. The following is a brief description of the characteristics of each program. It should be recognized that there is overlap between program areas in instances of specific application, however, these programs can be generally characterized as follows.

Transportation Demand Management (TDM)

This program consists of managing behavior regarding how, when and where people travel. TDM strategies are designed to reduce vehicular trips during peak hours by shifting trips to other modes of transportation. Transportation Demand Management strategies specifically target the work force which generates the majority of peak hour traffic. Some specific TDM strategies include:

- Ridesharing Programs
- Transit Usage
- Flex Hours
- Van Pools
- Bicycling and Walking
- Telecommuting
- Mixed Land Use Planning Techniques

Transportation Control Measures (TCM)

These programs are designed to reduce vehicle miles traveled, vehicle idling, or traffic congestion in order to reduce motor vehicle emissions.

Specific TCM program efforts can include:

- Ridership Programs,
- Park-And-Ride Lots,
- Telecommunications,
- Alternate Work Schedules,
- Trip Reduction Ordinances
- High Occupancy Vehicle Lanes
- Bicycle Facilities,
- Pedestrian Facilities,
- Public Transit,
- Maintenance of Vehicle Emission Control Systems, and
- Use of Low Emission Fuels.

Many of these programs can only effectively operate on a state or region-wide level, such as a low emission fuel program and vehicle emission control system maintenance. Other programs, however, can be implemented within the City.



Transportation System Management (TSM)

These programs are designed to identify short-term, low cost capital improvements that improve the operational efficiency of the existing transportation infrastructure. An effective TSM program, using the appropriate techniques, can improve circulation and reduce automobile emission throughout the planning area. Naturally, TSM strategies are used in coordination with TDM and TCM programs to improve local and regional circulation.

Specific TSM program strategies include traffic flow improvements such as:

- Traffic Signal Synchronization,
- Traffic Engineering Improvements (Geometric Design),
- Channelization,
- One-Way Streets,
- Turning and Bus Pocket Bays,
- Bus Terminals,
- Removal of On-Street Parking,
- Limiting Arterial Street Access,
- Street and Highway Widening,
- Bicycle Facilities, and
- Pedestrian Malls.

There are many ways for providing such facilities. The City should evaluate possible alternatives, including:

- 1) working with Caltrans and the Air District to identify suitable sites, which could be designated on the general plan land use and circulation plans;
- 2) consideration of funding of park and ride lots as mitigation during CEQA review of residential development projects;
- 3) coordinating with appropriate transportation agencies and major employers to establish express buses and vanpools to increase the patronage of park and ride lots; and,
- 6) allowing developers to reach agreements with auto-oriented shopping center owners to use commercial parking lots as park and ride lots and multi-modal transfer sites.

The Goals, Policies and Implementation Actions (See Section 6.2) of this Chapter incorporate applicable TSM measures that can be employed in the City of Gustine.

Issues Requiring Further Study

Throughout the twenty-year planning period, automobile and truck transportation will continue to be the primary mode for moving people and commodities in and through Gustine. This section responds to automobile and truck transportation as the primary source for moving people and commodities in and through Gustine.

The relationship between land use and circulation cannot be over-emphasized and the transportation objectives in this chapter are predicated upon the land use designations identified in the Proposed General Plan map.



It is also possible that land use designations could be amended (whether initiated by the City, County or private development) which would affect the function of a road and require changes to this Circulation Plan.

The location and classification of roads within the Gustine SOI will be those necessary to accommodate future land uses designated on the Proposed Circulation map which would serve the City through ultimate build out. The City Council believes a new east/west road is needed North of North Avenue to relieve the future congestion from planned residential development.

The City still advocates the designation and extension of Sullivan Road as an Arterial between State Highway 33 and Kniebes Road. Traffic modelling has demonstrated that the Sullivan to Kniebes Road loop will significantly reduce through town vehicle trips during the planning period.

Goal Area T: Transportation & Circulation

GOALS

1. An Integrated Road System that is Safe and Efficient

- T-1.1 Design Streets Consistent with Circulation Function and Affected Land Uses.
- T-1.2 Coordinate Circulation and Transportation Planning with Pertinent Regional, State and Federal Agencies.
- T-1.3 Design Major Roads to Maximize Efficiency.
- T-1.4 Study Development of a State Highway Bypass System Around Central Gustine.
- T-1.5. Provide for Safe and Accessible Public Parking that Promotes Non-Vehicular Travel Patterns and/or Use of Public Transit Systems.

2. A Circulation System that Minimizes Adverse Impacts upon the Community

- T-2.1 Promote Traffic Safety.
- T-2.2 Minimize Unnecessary Travel Demand on City Streets (DSM).
- T-2.3 Minimize Adverse Impacts on the Environment from Existing and Proposed Road Systems.
- T-2.4 Minimize Street System Impacts on Residential Neighborhoods and Other Sensitive Land Uses.

3. An Efficient and Comprehensive Public Transit System

- T-3.1 Support and Enhance the Use of Public Transit.
- T-3.2 Support a Safe and Effective Public Transit System.

4. A Comprehensive System of Safe and Convenient Bicycle Routes (Within the Community and Throughout the Urban Area)

- T-4.1 Encourage the Use of Bicycles as Alternative Transportation.
- T-4.2 Provide Convenient Bicycle Support Facilities to Encourage Bicycle Use.
- T-4.3 Maintain and Expand the Community's Existing Bicycle Circulation System.

5. A Comprehensive System of Safe and Convenient Pedestrianways

- T-5.1 Maintain a Pedestrian-Friendly Environment.
- T-5.2 Improve Planning for Pedestrians.

***Policy T-1.1******Design Streets Consistent with Circulation Function and Affected Land Uses.******Implementing Actions:***

- 1.1.a Implement the General Plan Circulation Plan (Figure 6.2) as development occurs.
- 1.1.b Whenever feasible implement a system of arterials and higher order streets in new growth areas based on the Circulation Plan concept of arterials and State Highways.
- 1.1.c Upgrade existing streets in older portions of the City as resources become available.
- 1.1.d Design and build residential collector streets that balance as effectively as possible competing needs to be safe and efficient yet preserve the residential nature of area.
- 1.1.e Study projected future areas of city expansion prior to development to identify the most effective circulation pattern(s).
- 1.1.f Consider measures to increase the capacity of the existing road network prior to constructing more capacity (additional lanes, new roadways, etc.).
- 1.1.g Require new construction or major renovation of commercial or multi-family buildings to replace, repair or provide improvements to meet current City standards.

Policy T-1.2***Coordinate Circulation and Transportation Planning with Pertinent Regional, State and Federal Agencies.******Implementing Actions:***

- 1.2.a Coordinate local circulation/transportation plans and improvements with interested area and regional agencies.
- 1.2.b Identify a hierarchy pattern of major streets within the City's General Plan and Sphere of Influence areas, and work with the County of Merced to retain unimpeded future rights-of-way to accommodate the current general plan period and projected future growth.
- 1.2.c Coordinate local circulation/transportation funding programs with Merced County and Caltrans to maximize impact of limited transportation dollars.

Policy T-1.3***Design Major Roads to Maximize Efficiency.******Implementing Actions:***

- 1.3.a Adhere, to the greatest possible extent, to Plan Standards for spacing streets that intersect arterials and higher order roadways.
- 1.3.b Improve traffic flow of all new Arterial streets to the greatest possible extent by the use of median strips of sufficient width to facilitate vehicle movement.
- 1.3.c Improve traffic flow of Arterials and other major roadways whenever possible by avoiding or eliminating on-street parking.
- 1.3.d Work to insure that land uses fronting Arterial streets have shared access across adjacent properties and provide sufficient on-site parking to avoid depending upon on-street parking.



- 1.3.e Promote the provision of on-site visitor parking in multi-family projects.
- 1.3.f Whenever feasible avoid, or eliminate, unnecessary or poorly placed median openings.
- 1.3.g Avoid when possible residential "fronting lots" and driveway access on Collectors and higher order streets.
- 1.3.h Obtain whenever feasible necessary rights-of-way in proximity to major intersections for needed turn lanes.
- 1.3.i In new growth areas, obtain expanded Arterial intersection rights-of-way (ROW) requirements.
- 1.3.j Approve driveway access locations only if consistent with approved minimum acceptable distances from major intersections, except in unusual circumstances.

Policy T-1.4

Study Development of a State Highway Bypass System Around Central Gustine.

Implementing Actions:

- 1.4.a Continue a program planning and design, in cooperation with the Merced County Association of Governments and Caltrans, for the SH33/140 bypass.
- 1.4.b Involve the public in the identification of appropriate Bypass routes and funding strategies.
- 1.4.c Plan for Collector street connections into the Bypass system in such a manner as to not reduce the capacity of the system unnecessarily.
- 1.4.d Review new development and/or City annexation proposals for consistency with Bypass route concepts and necessary local road linkages.

Policy T-1.5

Provide for Safe and Accessible Public Parking that Promotes Non-Vehicular Travel.

Implementing Actions:

- 1.5.a Sign parking lots and encourage their use; enforce parking time limits in the Downtown area.
- 1.5.b Encourage the business community to use off-street parking lots.
- 1.5.c Provide adequate parking to serve existing and future development and improve traffic flow on narrow streets.
- 1.5.d Retain all available off-street parking spaces.
- 1.5.e Develop a parking plan for existing and potential commercial areas..
- 1.5.f Provide public parking at strategic locations in the downtown area that accommodates both cars and buses.
- 1.5.g Require new development to provide adequate off-street parking.
- 1.5.h Pursue Federal and State funding for all circulation purposes, including specialized circulation facilities such as public transit, walking, biking, and riding trails as the need for such facilities arises.



Policy T-2.1
Promote Traffic Safety.

Implementing Actions:

- 2.1.a If fronting driveways cannot be avoided on a Collector or higher order street, seek design solutions that will allow automobiles to avoid backing out.
- 2.1.b Allow only adopted spacing of streets intersecting and traffic signals on any Arterial or higher order street, unless prior actions or unusual circumstances make this infeasible.
- 2.1.c Promote increased traffic safety with special attention to hazards that could cause personal injury.
- 2.1.d Reserve adequate road and intersection right-of-way to provide for the needs of traffic safety.
- 1.1.e Continue as feasible to mitigate or reduce safety hazards and program improvements to congested intersections before they become significant problems.
- 2.1.f Monitor traffic conditions on the State Highway system in the Gustine Planning Area and work with Caltrans to implement improvements where needed.
- 2.1.g Provide traffic controls at intersections where traffic warrants are satisfied.
- 2.1.h Work with Caltrans and MCAG to identify alternatives to upgrade SH 33/140 from the Highway 33/140 intersection to the southern City limits.
- 2.1.i Review intersections for signal warrants and investigate the congestion signals generate; identify signalization alternatives in meeting communities best interests.
- 2.1.j Require traffic signal installation and/or intersection improvements when development adds significant traffic volumes.
- 2.1.k Upgrade existing streets as needed to carry anticipated traffic. Provide extension and connection of existing streets, whenever possible, to improve traffic circulation patterns.
- 2.1.l Where traffic congestion occurs or safety equipment access is restricted, prohibit parked vehicle encroachment into the traveled way.

Policy T-2.2
Minimize Unnecessary Travel Demand on City Streets (DSM).

Implementing Actions:

- 2.2.a Promote bus service to and from special events from local parking facilities; charter bus service from the bay area and valley locations should be promoted for special events that are expected to draw large crowds.
- 2.2.b Reduce the number of trips to the post office by encouraging the postal service to provide delivery of mail to existing homes and businesses.
- 2.2.c Encourage retail stores to provide delivery service and telephone and catalogue shopping services.
- 2.2.d Encourage carpooling.
- 2.2.e Encourage employers to provide incentives to employees who carpool.



Circulation

- 2.2.f Plan for park-and-ride facilities at strategic locations along SH 33 and 140 in cooperation with Caltrans.
- 2.2.g Encourage delivery service to homes and businesses.
- 2.2.h Centralize civic services where possible (fire, police, government offices, etc.) to provide easy access from all points in the City.
- 2.2.i Work with employers and developers to provide employees and residents with attractive, affordable transportation alternatives.

Policy T-2.3

Minimize Adverse Impacts on the Environment from Existing and Proposed Road Systems.

Implementing Actions:

- 2.3.a Continue working to minimize environmental impacts associated with heavily traveled traffic corridors, such as high noise levels and stop and go traffic situations.
- 2.3.b Make a strong commitment to increase the number of people per vehicle so that the existing street system is utilized to its fullest.
- 2.3.c Consider ways to encourage employers to reduce impacts upon the existing street system.
- 2.3.d Avoid neighborhood street system designs whenever possible that requires a local resident to travel away from a local destination in order to reach it.
- 2.3.e Encourage road pattern designs that follow natural land contours and minimize the need for grading.
- 2.3.f Maintain and upgrade existing roadways as a priority over City financed new road construction.

Policy T-2.4

Minimize Street System Impacts on Residential Neighborhoods and Other Sensitive Land Uses.

Implementing Actions:

- 2.4.a To the greatest extent feasible, maintain a distinct hierarchy of streets that will provide for major roadways between neighborhoods rather than through neighborhood areas.
- 2.4.b Whenever feasible, approve street circulation patterns that discourage exterior traffic from driving through neighborhoods.
- 2.4.c Encourage design of local and collector streets within neighborhoods to provide multiple, reasonably direct routes to local neighborhood destinations .
- 2.4.d Avoid whenever feasible neighborhood street system designs that make it more convenient for a local resident to use an arterial street to reach an in-neighborhood destination than to remain on the local street system.
- 2.4.e Locate Arterial and other higher order streets away from homes, schools and parks.
- 2.4.f Require setbacks that will ensure adequate room for street widening and beautification.
- 2.4.g Promote street beautification projects including tree planting, sidewalk construction and other street-scape enhancements.
- 2.4.h Require street signs that enhance public safety and complement the



neighborhood environment.

- 2.4.i The City shall designate appropriate truck routes. Industrial and commercial development shall be planned so that truck access through residential areas is minimized.

Policy T-3.1

Support and Enhance the Use of Public Transit.

Implementing Actions:

- 3.1.a Promote land development patterns and site design criteria that support and enhance the use of public transit.
- 3.1.b Whenever feasible, avoid residential subdivision designs that require pedestrians to duplicate walking distance (double-back) to reach public transit routes.
- 3.1.c Work with the consolidated transit system to seek Federal, State, and other funding sources which provide major funding for transit equipment, maintenance, and operation. Support legislation that will provide additional funding.
- 3.1.d Support and participate in regional public transit planning
- 3.1.e Plan for multi-modal transfer sites that incorporate auto parking areas, bike parking, transit, pedestrian and bicycle paths, and park and ride pick-up points.
- 3.1.f Encourage park and ride lots at suitable locations serving long distance and local commuters.
- 3.1.g Promote public transit service in the county and region.

Policy T-3.2

Support a Safe and Effective Public Transit System.

Implementing Actions:

- 3.2.a Include public transportation access in the review process for major public and private development projects, as well as all significant land use design proposals considered by the City.
- 3.2.b Provide transit stops on major streets.
- 3.2.c Avoid whenever possible public transportation transfer points that force passengers to cross major vehicle routes on foot.
- 3.2.d Provide off-street passenger loading/unloading at major public transportation destinations (shopping centers, etc.) whenever possible.

Policy T-4.1

Encourage the Use of Bicycles as Alternative Transportation.

Implementing Actions:

- 4.1.a Encourage area employers to promote bicycle use through incentive programs or other means.
- 4.1.b Study options and opportunities for extending the off-street trail (pedestrian and bicycle path) system.
- 4.1.c Continue to support whenever feasible local efforts to promote cycling.



- 4.1.d Seek to involve a cross-section of actual bicycle users in bicycle planning efforts and transportation-related bicycle activities.

Policy T-4.2***Provide Convenient Bicycle Support Facilities to Encourage Bicycle Use.******Implementing Actions:***

- 4.2.a Develop guidelines for public and private development relating to the design and location of bicycle parking facilities.
- 4.2.b Design criteria in the construction of all bicycle trails, lanes and routes (Class I, II, and III bikeways) should conform to the State of California "Planning and Design Criteria for Bikeways in California;" Class I bikeways should have grade separation with all major streets where possible.
- 4.2.c Support the placement of bicycle racks on buses and at public places, such as parks and playgrounds and other appropriate public site destinations.
- 4.2.d Require future development to construct bikeways included in the proposed system as a condition of development.
- 4.2.e Encourage future commercial development to provide bicycle access to surrounding residential areas.
- 4.2.f Require future commercial development to place bike racks near entrances for employees and customers.
- 4.2.g Meet the requirements of the Americans with Disabilities Act when constructing facilities contained in the proposed system, where applicable.
- 4.2.h Encourage future development to consider schools as important destinations for bicyclists when designing circulation systems within new developments.
- 4.2.ia Provide connections to the proposed system from all existing and future transit facilities, stations, and terminals in Merced County.
- 4.2.j Provide support facilities such as bicycle racks, personal lockers, and showers at appropriate locations such as "park and ride" facilities, employment centers, schools, and commercial centers.
- 4.2.k Incorporate standard signing and traffic controls as established by Caltrans to ensure a high level of safety for the bicyclist and motorist.
- 4.2.l Consider the effect on other transportation facilities such as travel lane widths, turn lanes, on-street parking, and on-site circulation when planning and designing on-street bikeways.

Policy T-4.3***Maintain and Expand the Community's Existing Bicycle Circulation System.******Implementing Actions:***

- 4.3.a Construct bikeways identified in the Merced County Bikeway Master Plan and provide for the maintenance of both existing and new facilities.
- 4.3.b Update City of Gustine roadway design standards to include sufficient pavement sections to accommodate bikeway facilities.



- 4.3.c Consider landowner concerns when planning and acquiring off-street bikeway easements.
- 4.3.d Coordinate implementation and planning of the Bicycle Transportation Plan with the County of Merced.
- 4.3.e Explore available revenue sources for implementing the Bicycle Transportation Plan.
- 4.3.c Provide bicycle lanes and sidewalks on new streets and existing streets when improvements are planned.
- 4.3.f Provide bicycle lanes or paved shoulders on all new arterial and collector roadway facilities.
- 4.3g Prohibit parking on arterial and collectors so that the shoulder of the roadway can be used by cyclists and emergency parking.
- 4.3.h on local subdivision streets, limit traffic speeds and volumes to permit the cyclist to use the traffic lane.
- 4.3.i Require new development to provide additional roadway widths and/or separate bike paths to accommodate bicycle traffic where shown on the master City Bikeway Plan.

Policy T-5.1***Maintain a Pedestrian-Friendly Environment.******Implementing Actions:***

- 5.1.a Retain parkstrip and street tree planting requirements in residential areas.
- 5.1.b Locate streetlights, street signs, fire hydrants, and other obstacles so they do not obstruct sidewalks and other pedestrianways.
- 5.1.c Continue to require corner curb cuts to accommodate wheelchairs.
- 5.7.d Work to maintain safe and convenient streetscape for pedestrians.
- 5.1.e Continue to require sidewalks and pedestrianways for subdivisions and other development projects.
- 5.1.f Continue to encourage safe and convenient pedestrian environments in the central business district and other major commercial areas that attract a great deal of pedestrian traffic.
- 5.1.g Continue to encourage the provision of plazas, malls, arcades, and walk-throughs.
- 5.1.h Encourage the planting of shade trees and as a minimum plan for the prospective establishment of rest areas with seating facilities along major pedestrianways .
- 5.1.i Continue to review and evaluate possible options for dealing with the issue of incomplete pedestrian access to development projects that will be major pedestrian destinations.

Policy T-5.2***Improve Planning for Pedestrians.******Implementing Actions:***

- 5.2.a Seek to provide more flexible, more usable pedestrian access opportunities to land uses and land use combinations that are prospective pedestrian destinations (sports club facilities, schools, government facilities, parks, public open space areas, etc.)
- 5.2.b Evaluate the future need for sidewalks in business parks and industrially zoned areas.



- 5.2.c Continue to review land use and project proposals with the intent to avoid pedestrian barriers that prevent, or create unnecessarily circuitous, access to community and commercial areas.
- 5.2.d Identify and develop safe walkways from residential areas to schools and shopping for the convenient use of pedestrians.
- 5.2.e Develop a sidewalk plan that will expand the existing sidewalks and identify areas where new sidewalks are needed.
- 5.2.f Provide for pedestrian facilities in public service, commercial and multi-family developments.
- 5.2.g Subdivision and site plan approvals should be reviewed for location and development of new sidewalk facilities and connections with existing sidewalk facilities.
- 5.2.h Develop walkways in commercial centers, including stairways to parking lots when necessary.



The City of Gustine is a city of approximately 10,000 people, located in the Central Valley of California. The city is known for its rich agricultural heritage and its proximity to the Central Valley Project. The city's economy is primarily based on agriculture, with a focus on the production of almonds, grapes, and other fruits. The city is also home to a number of small businesses and service industries. The city's population is diverse, with a mix of ethnicities and cultures. The city is known for its friendly atmosphere and its commitment to providing a high quality of life for its residents. The city is also known for its beautiful scenery and its many parks and recreational areas. The city is a great place to live, work, and visit.

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CHAPTER 8 HOUSING





Introduction

This Housing Chapter is a comprehensive statement that facilitates the development of housing to meet the needs of existing and future residents of Gustine. The Housing Element is an official response to a growing awareness of the need to provide housing for all economic segments of the community. The residential character of the City is, to a large extent, determined by the variety of its housing and the location and maintenance of housing. The Housing Element is an official municipal response to a growing awareness of the need to provide housing for all economic segments of the community. It establishes policies that will guide City decision-making, and sets forth a program to implement housing goals. It should be noted, however, that it is highly recommended that this Housing Element be updated in 2001, after the 2000 Census has been completed.

Issues and Intent

The Housing Element identifies and analyzes existing and projected housing needs and includes goals, objectives and policies along with scheduled programs for the preservation, improvement and development of housing in Gustine. This element is mandated by Government Code section 65583, 65302(c).

The California Department of Housing and Community Development (HCD) is responsible for reviewing the housing elements of all cities in California for their compliance with State law requirements embodied in Article 10.6 of the Government Code. When reviewing housing elements, HCD evaluates their effectiveness based on conformance with three broad content requirements of State law:

- 1) Identification and analysis of existing and projected housing needs and an inventory of resources and constraints relevant to meeting those needs.
- 2) A statement of goals, policies, and quantified objectives.
- 3) A discussion of scheduled programs for the preservation, improvement, and development of housing.

Glossary of Terms

Following are definitions for important terms used in the Housing Element:

Affordable Housing. This is a popular term that is often misunderstood. Many people think it refers only to low income housing. However, in technical terms, it can refer to nearly any unit of housing. "Affordable housing" refers to the relationship between the price of housing (either sale price or rent) and household income. A \$500,000 home is "affordable housing" for households making \$200,000 per year. However, it would not be affordable housing for the vast majority of households in Gustine.

Affordability. There are two factors affecting affordability for housing: the price of housing and household income. The common standard is that households should spend approximately 30 percent of their income on housing. That can vary, however, according to household size. Large households face higher costs for other items (e.g., food, childcare, insurance, etc.), and therefore cannot afford to spend as much on housing.



Income Categories. The federal and state governments require that local jurisdictions consider the housing needs of households in various "income categories." Income categories are determined by the median household income at the local level. In cities such as Beverly Hills, where incomes (in general) are quite high, an annual household income of \$40,000 might be considered "low income." In Merced County, the median household income in 1989 was \$24,727, well below the statewide median of \$35,798 (U.S. Census Bureau).

Very Low Income. Very low income households are defined as households with incomes less than 50 percent of the county median.

Low Income. Low income households are defined as households with incomes between 50 percent and 80 percent of the county median.

Moderate Income. Moderate income households are defined as households with incomes between 80 percent and 120 percent of the county median.

Above Moderate Income. Above moderate income households are defined as households with incomes over 120 percent of the county median.

Below Market Rate (BMR) Unit. A Below Market Rate (BMR) unit is a housing unit that sells or rents for less than the going market rate. It is typically used in reference to housing units that are directly or indirectly subsidized in order to make them affordable to very low, low, or moderate income households. If units can be provided by the market at rates affordable to lower income households, then BMR units become unnecessary.

Subsidized Units and Section 8. "Subsidized units" typically refers to units that rent for less than the market rate due to a direct financial contribution from the government. Section 8 is a subsidy program funded by the federal government and overseen by the County Housing Authority to provide low rents and/or housing payment contributions for very low and low income households.

Zoning. Zoning is an activity undertaken by local jurisdictions to direct and shape land development activities. The intent of zoning is to protect the public health and safety by ensuring that incompatible land uses (e.g., a school and an oil refinery) are not located next to each other. Zoning also impacts land values, creating and taking away "capital" for and from property owners. For example, a lot that is zoned for commercial development is more valuable (in financial terms) than a lot that is zoned for open space. Typically, lots that are zoned for higher densities have greater value on the market than lots that are zoned for lower densities. Zoning is one of the most important regulatory functions performed by local jurisdictions. The City of Gustine's zoning is set forth in its Zoning Ordinance and Zoning Map.

The General Plan. The State of California requires that every city and county have a "general plan." This plan sets forth long-term goals, objectives, and policies that will guide the community's physical development. By law, a general plan must contain seven "elements," or parts of the plan that address



different issues. Those required elements are land use, circulation, housing, conservation, open space, safety, and noise.

Density. This refers to the number of housing units on a unit of land (e.g., ten units per acre). In the City of Merced, the lowest density residential zoning is "R-1;" it allows a maximum of 1 housing unit per 6,000 square feet. The highest density residential zoning, R-4, allows 1 unit per 1,000 square feet. The majority of the City of Merced is zoned for low density residential development.

Residential Planned Development (RPD) Zoning. This is a zoning designation designed to provide greater flexibility in project design and review than is typically possible under "traditional" zoning (e.g., R-1). RPD zoning is often used to achieve clustered housing design (resulting in more open space) and mixed use development (helping reduce reliance on the automobile). RPD and similar zoning designations have become increasingly popular in cities around the country as a means of achieving community design and development goals.

Mixed Use. This refers to different types of development (i.e., residential, retail, office, etc.) occurring on the same lot or in close proximity to each other. Most European and many older American cities have large areas of mixed use development, with housing typically located above store fronts on main streets. Mixed use has become popular in the U.S. in the last ten years as a strategy for decreasing dependence on the auto and revitalizing retail and business districts.

Lot Coverage, Set Backs, and Height Restrictions. These requirements determine the size and placement of buildings on their lots. They are set forth in the City's Zoning Ordinance and vary for each zoning district. Lot coverage is typically stated as a percentage and refers to the lot area that may be covered by the building. A 6,000 square foot lot with a 50 percent maximum lot coverage can have a building occupying 3,000 square feet of lot area. Set Backs prescribe the minimum distance between the property lines and the housing structure while Height Restrictions prescribe the maximum height of the structure. Together, these restrictions control the size and placement of a building on a lot.

Second Units. Also referred to as "in-law apartments" or "granny flats," Second Units provide a second housing unit on the same lot as a single family home.

Substandard Housing. This refers to housing where major repair or replacement may be needed to make it structurally sound, weather-proofed, and habitable.

Emergency Shelters and Transitional Housing. These are two types of housing specially designed to meet the temporary needs of homeless families and individuals. An "Emergency Shelter" is a facility designed to provide free temporary housing on a night-by-night basis to homeless families and individuals. "Transitional Housing" provides longer term accommodations (often for a span of several months) to homeless families and individuals.



This provides a stable living environment for the period of time necessary to learn new skills, find employment, and/or develop a financial base with which to re-enter the housing market.

Review of Previous Element

Evaluation of the 1993 Housing Implementation Program

Gustine was successful in achieving several housing goals during its last planning period. In the area of providing adequate housing for all persons in the community, the City coordinated the construction of 35 senior housing units, 40 low income multi-family units, and over 180 low to moderate income single family units. The City applied for Community Development Block Grant (CDBG) monies for housing rehabilitation and received \$500,000. In addition, currently, the City is also administering a CDBG home buyer program to assist lower income groups with the purchase of a home.

The City has promoted the efficient use of available land by adding a sewer lift station to the southwest portion of the City, and adding 1333 linear feet of 10" sewer trunk and water lines thus improving the infrastructure to existing housing and developable single family parcels. These improvements were made in conjunction with and immediately benefited the Brentwood Subdivision.

In the interest of avoiding an undue concentration of low income households, Gustine has been able to distribute assisted housing projects throughout the city. This has been the result of implementing the City's land use layout defined in the 1985 General Plan.

Finally, in order to provide an open and free choice of housing, the City has promoted or facilitated several government housing programs including FmHA 502 & 515, CDBG, and the Merced County Housing Authority. These programs have been reviewed regularly to eliminate overlap and to ensure the proper and efficient use of. The City has also added to its choice of housing by improving the delivery of services through its sewer and water expansion programs. These improvements when complete will serve as incentives for development and the rehabilitation of local housing units.

Evaluation of 1992 Housing Implementation Program

This update is projecting significant changes in population, employment and land use for the Gustine sphere of influence. It is our assumption that as housing prices and rents continue to rise, a greater number of people will be paying more than 25% of their gross income for housing in the future. This update identifies various housing needs which the City's goals, objectives and policies are aimed at meeting. Among these are the continued need for low income housing to serve the elderly, disabled, and single parent households. Affordable rental units for large families and for seasonal workers are also needed and new ag related industry would accelerate this need. The moderate income family in this area has had difficulty purchasing a home which adequately meets their needs because of relatively low income level averages and the lack of new or rehabilitated housing stock. The low to moderate housing that has been constructed in recent years has been quickly occupied as evidenced by the low vacancy rates.

As has been pointed out in the Land Use Element, there is more than adequate land in the sphere of influence to accommodate the future housing needs of



Gustine. Large areas have been identified for low, medium and high density residential uses which are located in reasonable proximity to proposed employment, schools and services.

The City's infrastructure is being substantially improved to enable more residential growth which is demonstrated by the sewer plant expansion. Additional water wells are also needed to provide potable water and fire flows to Gustine's future residents. The construction of a water loop system will be accomplished with the assistance of new development. Road system improvements, school construction, and various forms of community redevelopment will further aid public services. A Storm Drainage Master Plan needs to be completed to identify appropriate locations for drainage facilities and reduce the threat of flooding to personal property. This is expected to be completed in Fiscal Year 1999-2000 with the aid of a Community Development Block Grant.

Goals and Policies

Experience has shown that the local market can accommodate a wide range of incomes in Gustine. Very-low and low-moderate housing needs can often be met through the sale of existing homes. The City has policies that encourage development of larger density projects closer to the downtown area.

Area: Conservation and Rehabilitation

Maintenance and improvements for the existing housing stock

Policies

Encourage homeowners to make application for FmHA 504 Single Family Rehabilitation allocations which provides home repair loans up to \$7,500 at 1 percent interest to very low income families for the purpose of making repairs needed for the health and safety of the families for the purpose of making repairs needed for the health and safety of the family and/or the community. The ability to achieve this goal is dependent upon availability of funds from FmHA and interested property owners.

Year: Ongoing

Funding Source: Farmers Home Administration

Area: Affordable Housing

Balanced mix of housing types to serve various economic groups in the community

Policy

Promote the efficient use of land available for housing

Examine existing zoning laws at a minimum of once per year or as needed, on a case by case basis to insure that innovative housing types are considered and can be constructed cost effectively desirable settings.

Increase The Stock of Affordable Housing for Very Low, Low, and Moderate Income Households.

Encourage A Mix of Housing Throughout the City To Meet The Needs of Different Income Groups.

- Encourage The Construction of Housing and Facilities To Meet Special Needs, Including Farmworkers, Large Families, Seniors, And People



With Physical Or Mental Disabilities.
Target Date: Annually
Responsibility: Planning and Building

POLICIES

Support increased densities in residential areas.

Review design standards to support affordable housing.

Develop and implement an Affordable Housing Ordinance.

Pursue joint development agreements.

Pursue State and Federal funds for new housing construction.

Support housing to meet special needs.

Educate the Public Regarding Affordable Housing Issues And Programs.

*To ensure that the City's affordable housing programs and related efforts have maximum impact and benefit, to promote equal housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, or color, and to build public awareness of and support for affordable housing programs, the City shall provide public information and educational materials on affordable housing issues and the programs being undertaken by the City to address those issues. To this end, the City shall promote and pursue the following **Implementing Programs**.*

Provide Ongoing Public Information on Affordable Housing Issues and Programs.

Ensure that information on affordable housing issues and programs in the City of Gustine is made available to city residents, developers, and local lenders, by placing program brochures, copies of city documents, and other pertinent information in the city libraries and at City Hall. In addition, make this information available to community-based groups serving lower income residents. Maximize public visibility for housing programs by encouraging representatives of the local media to cover affordable housing as an important community issue in need of community-wide attention and response.

Target date: Ongoing.
Responsibility: City Staff.



Periodically Review and Evaluate the Housing Action Plan.

To ensure accountability to the Housing Action Plan's goals and to ensure a Plan that is responsive to changing needs, the City shall conduct an annual review and evaluation of the Housing Action Plan. To this end, the City shall promote and pursue the following Implementing Programs.

Conduct an Annual Program Review and Evaluation.

Direct City staff to review and evaluate program implementation on an annual basis and to present the results of that review in written form to the Planning Commission, and the City Council. The review shall be conducted in conjunction with the City's annual budgeting process and shall include expenditures and results by program; summary of success towards meeting stated targets, and an update on progress towards longer-range goals. Recommendations for revisions and/or specific program alteration may also be made and submitted for approval.

Target date: Annual.

Responsibility: Planning Commission, and City Council.

Review, Revise and Confirm Goals, Policies, Programs and Quantified Objectives Every Five Years.

Conduct a comprehensive review of goals, policies, programs, and quantified objectives included in the Housing Action Plan on a five-year interval. Revise and re-confirm goals, policies, and programs and identify new quantified objectives during the review process. Update the City's Housing Element and Comprehensive Housing Affordability Strategy to reflect the new five-year Housing Action Plan.

Target date: 2001.

Responsibility: Planning Department, Planning Commission, and City Council.

Coordinate with County-wide Policies and Objectives.

City staff shall work with staff from the County to periodically review and update policies, programs, and quantified objectives identified in the City of Gustine's Housing Element and related policy documents to ensure consistency with projections from the Merced County Association of Governments. Consistency between the City and County housing policies and programs shall also be reviewed, with opportunities for cooperative efforts identified and pursued. The review shall coincide with the Annual Program Review authorized in Implementing Program H-4.5a.

Target date: Annual.

Responsibility: Planning Department.



Housing Analysis

The Gustine Housing Element has considered the city's fiscal and environmental characteristics in determining the extent to which it is able to participate in the regional housing need. Given the financing available, price of land and cost of construction, this element endeavors to plan cooperatively with other local governments.

Households

Like many smaller communities throughout California, Gustine lacks the resources to continuously keep an inventory of its existing housing stock. Furthermore, the only available data is from the most recent Census.

At the time of the 1990 Census, there were 3,931 people living within the Gustine City limits. There were also 1,523 occupied housing units (households) and 60 vacant houses. Gustine is comprised of approximately 63% owner occupied units, 34% renter occupied units and has a 3% vacancy rate. The summer rental vacancy rate is generally less than 1% because of the migrant farm worker influx to Gustine.

Cost of Housing vs. Ability to Pay

In 1990, the City's median home value was \$94,500. The median contract rent was \$303 per month. According to the 1990 Census, over 266 (49%) of the renter households in Gustine paid 25% or more of their gross income for rent and of those, 258 (49%) had household incomes of less than \$20,000. There were 263 (30%) owner households that had selected monthly payments greater than 25% of their income and of these, 93 (11%) earned less than \$20,000.

In June 1991 the sale price of homes ranged from \$60,000 to \$160,000. The median sale price for a 1,500 square foot three bedroom, two bath home was approximately \$112,000. Lower priced homes were small, probably one bedroom, which sold for an average price of \$66,000. Local realtors observed an increase in the price of lower priced homes, and a steady price for moderate homes during 1998. Homes under \$130,000 sell well, while higher priced homes (some advertised as high as \$230,000) stay on the market for a greater length of time. Although these homes seem moderately priced compared to other urban areas, providing affordable home ownership for moderate income families in Merced County is a challenge.

Mobile homes provide a more affordable means of home ownership for some residents. A new single-wide mobile home (14'x 60') costs between \$25,000 and \$40,000 depending on amenities, while used mobile homes range between \$2,500 and \$40,000.

There is presently only one mobile home park in the City which is for seniors and has a total of 100 spaces. There are 18 other mobile homes in the City, most of which are in the vicinity of the Beatrice Cheese factory along Highway 140, east of the downtown area.

Household income is a critical factor in determining the type and condition of housing in which people live. According to the 1990 Census, the Gustine median per capita income was \$14,303 per year, compared to \$10,606 for Merced County and \$16,409 for the State of California.



Gustine

\$14,303

Merced County

\$10,606

State of California

\$16,409

**Median
Per Capita
Income**



Tables H-2 and H-3 illustrate the gross rent and house payments as a percent of income.

Table H-2: Number of Renter Households by Gross Rent as a Percent of Income

Rent as % of Income	<10,000	10,000-19,999	20,000-34,999	35,000-49,999	50,000 or more	Total
0-19%	0	12	60	104	19	195
20-24%	0	11	30	10	6	57
25-29%	21	10	4	4	0	39
30-34%	18	43	0	0	0	61
35+%	90	76	0	0	0	166
Not computed	0	14	0	0	0	14

Source: 1990 US Census

Table H-3: Number of Owner Households by Home Ownership Costs as a Percent of Income

Owner Costs as % of income	< 10,000	10,000-19,999	20,000-34,999	35,000-49,999	50,000- or more	Total
0 -19%	17	66	141	114	131	469
20-24%	15	21	28	37	38	139
25-29%	8	13	21	47	9	98
30-34%	0	0	17	14	11	42
35+%	33	39	30	13	8	123

Source: 1990 US Census

Table H-4:

Number of units in need of rehabilitation	414	52	15	481
% of units in need of rehabilitation	33%	29%	13%	31%
Number of units surveyed	156			

Source: 1993 Self Help Survey

Of those surveyed, a further breakdown was done showing the degree to which homes were in need of repair. Of the 156 surveyed, 51% were in need of moderate repairs and 36% were in need of substantial repairs. Table H-5 shows the breakdown of the survey.

Table H-5 1993 Breakdown of Units Classified as in Need of Rehabilitation

	Number of Units	% of Units Surveyed
Minor	18	12%
Moderate	80	51%
Substantial	56	36%
Dilapidated	2	1%
Total	156	100.0

Source: 1993 Self Help Survey



The 1990 U.S. Census indicated that 120 households in Gustine were defined as overcrowded. Of these, 92 (77%) were renter households and 28 (23%) were owner occupied households.

The U.S. Census Bureau defines overcrowding as more than one person per room, not including the kitchen and bathroom. Overcrowding may be a more significant problem than statistically indicated, especially during the summer months when an influx of seasonal and farm workers arrive.

Housing Stock Conditions

Housing stock conditions in Gustine are generally good due to active abatement and code enforcement. Many of the City's older houses are also located in stable neighborhoods and are maintained.

Older housing stock can become an important source of housing for low and moderate income people as these houses "filter down" in price. Unfortunately, many older "filter down" units require substantial maintenance and repair that sometimes adds to the "affordability gap" for moderate income households.

Permit Activity

From 1990 to the present, the largest number of new residential permits were issued on the south side of the city off of Sullivan Road. Other new permits were obtained throughout the city, but are not concentrated in one particular location. Map H-1 shows permit activity for 1998.

Rental Activity

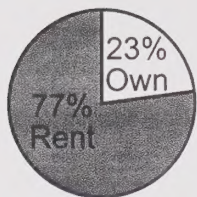
Rents within the city vary depending upon the type, age, location, and amenities of the units. Rents range from under \$100 a month to more than \$750 a month, the median being \$303 a month (1990 Census). Rents for one and two bedroom duplexes and apartments now range from \$275 to \$365 per month. The typical two bedroom apartment rents for \$360 per month. Rents for two and three bedroom houses range from \$500 to \$800 per month. Meredith Manor, built in 1985, is a 40-unit complex with subsidized rents for low income families.

According to the California Housing Partnership Corporation's 1991 "Inventory of Federally Subsidized Low-Income Rental Units at Risk of Conversion", the City had no "at risk" units during the 1992 planning period. There are also no locally-subsidized units at-risk, as the City has not issued mortgage revenue bonds, has not approved any density bonuses with financial assistance, does not have an in-lieu fee program, and has not assisted multifamily housing with redevelopment or CDBG funds.

It appears, however, that Gustine Gardens will be at risk of conversion in the year 2000 and Meredith Manor in the year 2008, when their twenty year agreements with Farmer's Home expire. In order to retain these units as low income, the City will pursue a cooperative agreement with the Merced County Housing Authority to acquire and manage these housing developments.

Housing Condition and Overcrowding

In 1993, a housing survey was done in Gustine. Among the issues addressed were housing condition and overcrowding. Table H-4 summarizes the number of units in 1993 in need of repair.



120
Overcrowded
Households



Map H-1: Permit Activity







Table H-4 1993 Housing Conditions

	Single Family	Multi- Family	Mobile Units	Total
Number of Units in Area	1270	177	115	1562
Number of units in need of rehabilitation	414	52	15	481
% of units in need of rehabilitation	33%	29%	13%	31%
Number of units surveyed	156			

Source: 1993 Self Help Survey

Public Facilities and Services

The City's engineer and a consulting engineer completed three studies in 1990, which more specifically defined local water and wastewater system needs. The City Council has used the results of these studies to determine hook-up fees and water and sewer rates, the money from which will be used to make system improvements.

One deficiency that has not yet been comprehensively analyzed or funded for improvement is the city's storm drainage system. It is estimated that within three years, a revised storm drainage plan will need to be completed. This will become a priority during the next two years and before significant development takes place in northern Gustine.

Public Protection

Gustine currently has a 25 member volunteer Fire Department and it also contracts with the County for fire services. The City's Police Department provides adequate service with 6 full time officers, and full time dispatching.

Special Needs

Residents with special needs in the City of Gustine include the elderly, large families, disabled people, families with a single parent head of household, farm workers, and the homeless.

Currently there is no working relationship between the City and the Merced County Housing Authority. However, there are some low-income residential areas managed by Professional Apartment Management (PAM) of San Joaquin County, in which residents must meet FMHA low income criteria. PAM believes there is a need for additional low income housing, since they do have a waiting list.

Households in the City of Gustine that appear to have the most critical needs are the elderly and single parent headed households. Both groups are sizable percentages of the residents in Gustine with very low incomes, coupled with the need for unique housing, such as larger living units for single parent headed families or accessible community environments for the elderly. These factors sometimes make adequate housing for the two groups difficult. Large family, farm worker, and disabled person households also have special needs.

Elderly

The elderly group in Gustine experienced above average growth between 1980 and 1990. This group grew by 38% compared to the 25% growth for the entire population during the ten year period. In 1990, 541 (36%) of the City's 1523 households consisted of residents 65 years or older. Of these, 108



elderly householders rented homes.

Gustine Garden Apartments, a 35 unit senior citizen housing development was built in 1982 by private enterprise with the use of a 515 Federal loan through Farmer's Home Administration. These duplexes, designed for the elderly are a tremendous asset to the City and there will be an increasing demand for more of these types of units in the future.

It is interesting to note that there are a significant number of people in Gustine who live alone. Of the 378 men and women who live alone, according to the 1990 US Census, 232 or 61% are over the age of 65.

This indicates that there is, or will soon be, a demand for a convalescent facility, more retirement oriented residential communities or both. The City can entertain proposals for these in any medium to high-density residential district using a Planned Community overlay zone. The smaller six person in-home care facilities can be located in any residential district.

Single Parent Head of Household

Single parent heads of households families comprised 12.5% of all households in Gustine in 1990, with 143 households (9.4%) headed by females and 47 households (3.1%) headed by males. In 1990, 96 of the children who lived in single family female head of households lived below poverty level (70% of all children in single female headed households), while all children living with single male headed households lived above the poverty level. Most of the children living below poverty level were under age six.

Thirteen percent of children under six living with a single mother had mothers who worked, while 70% of children between six and 17 living with a single mother had moms who worked.

As in much of the surrounding area, single-headed families with children are one of the groups most in need of public assistance. The status of such families has planning implications for housing, childcare, recreation programs, schools, and other social services. Gustine recognizes the need for these families to have affordable rental housing, often with three or more bedrooms.

Farm Workers

During the summer and early fall, there is a large migrant farm worker population in Gustine. The size and needs of this group are difficult to gauge because of its transient nature and the fact that some of these workers are undocumented aliens.

The availability of housing for farm laborers is impacted by the influx of better paid packing shed workers who compete for short-term housing. What often happens is that farm laborers "double up" or live in "non-housing" units. This make-do type of farm worker housing is detrimental to the neighborhoods where it takes place and points to a need for adequate seasonal housing.

The 1991 "Merced County Housing Needs Determination" estimates that 280 assisted housing units are currently needed countywide, assuming that farm workers needs are equal to their proportion of the labor force.



Merced County currently has three programs that are specifically directed towards farm worker housing. The FMHA 514 and 516 programs provide assistance to public or private non-profit organizations to develop farm labor housing. The State Housing and Community Development Farmworker Housing Grant Fund provides matching funds to the same organizations for new construction or rehabilitation of housing. The State Office of Migrant Services operates two migrant farm worker housing centers in the County, one of which is located on State Highway 165 north of Los Banos.

Homeless

Gustine occasionally has homeless persons however, there is virtually no permanent group living on the street. The Police Department, in cooperation with the Salvation Army, work to find temporary lodging for destitute persons and families. Additional emergency housing and longer term support is provided by the County Social Services Department and local churches and service organizations.

Persons in Group Quarters

Group quarters refer to two types of living arrangements: a living situation where unrelated persons share kitchen and perhaps bath facilities such as a boarding house and the other situation applies to units in which people are cared for and includes facilities such as hospitals, convalescent homes, boarding schools, and prisons.

According to the 1990 U.S. Census there are currently no Gustine residents living in group quarters. This could change in the next five years as an aging population could be served by the development of a convalescent home.

A survey was done in 1993 to address the current housing conditions in Gustine, as illustrated by Table H-4. The survey also included units that were in need of rehabilitation, illustrated in Table H-5. The City applied for and received a CDBG housing rehabilitation grant from the State.

Table H-4 1993 Housing Condition

	Single Family	Multi- Family	Mobile Units	Total
Number of Units in Area	1270	177	115	1562
Number of units in need of rehabilitation	414	52	15	481
% of units in need of rehabilitation	33%	29%	13%	31%
Number of units surveyed	156			

Source: 1993 Self Help Survey

Table H-5 1993 Breakdown of Units Classified as in Need of Rehabilitation

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Minor	18	12%
Moderate	80	51%
Substantial	56	36%
Dilapidated	2	1%
Total	156	100.0

Source: 1993 Self Help Survey

The 1990 Census indicated that in Gustine, 120 households were defined as overcrowded. Of these, 92 (77%) were renter households and 28 (23%) were owner occupied households.



Existing and Potential Housing Sites in Gustine

Gustine has adequate land within its proposed Sphere of Influence to easily accommodate residential development needs through 2020. The City of Gustine has a small amount of undeveloped vacant land within the City limits, approximately 105 acres, which covers a range of residential zoning (i.e. R-E, R-1, and R-3). All of the areas within the City limits are feasible for development as public facilities become available, however some on-site improvements would be needed.

Residential Zoning

The current zoning categories will be updated to reflect changes in the General Plan for all land use categories. The following are the definitions of zoning categories that will be used:

Low (1.0 –6.0) du/ac)

The low density development provides for the development of conventional single family detached houses.

Medium (6.1-10.0 du/ac)

The medium density category provides for the development of medium density single family uses. Detached and attached single family homes, patio homes or zero lot line homes are allowed within this category. The permitted level of density will be based upon the achievement of performance standards.

Medium/High Density (10.1-15 du/ac)

The medium high density category provides for the development of moderately dense residential uses, such as multi-family duplexes, townhouses, and small lot single family detached uses. The permitted level of density will be based upon the achievement of performance standards.

High Density (15.1-25 du/ac)

The high density category provides for the development of multi-family apartments and condominiums.

Mobile Home Park District (MPD) This designation combined with medium high density residential provides for mobile home use where the City may regulate the standards of lot size, yard and park area, landscaping, walls, signs, access and parking. A range of 10 to 20 acres is recommended, with a density of 12 du/acre.

Infrastructure

New development is required to contribute towards the ongoing expansion of wastewater facilities. New development is also expected to contribute to the construction of water "loop" lines and any new wells that may be needed. (For more information see Circulation Chapter).

Several areas outside of the City have reasonable access to public facilities. These areas are immediately south of the City limits, but contiguous to them. Areas to the northwest of the City have potential for development and would require extensions of public facilities. Development of areas outside of the City would also require annexation.



HOUSING CONSTRAINTS

Summary of Residential Land Potential

The Residential Potential Map H-2 lists undeveloped areas "A" through "C" and categorizes them as very good, good, and fair in their potential for residential development. The primary factors in rating residential development potential are sewer and water availability, storm water drainage, zoning and surrounding uses. A brief description of each area is given below.

AREA "A" (Very good)

These areas can be easily developed because all public facilities are available or accessible. All areas are located in a functional storm water drainage zone. Area A-1 requires no major modifications to sewer, however, development will be expected to contribute toward and/or install sections of a 12" water system "loop".

Area A-2 is subject to the same requirements as A-1, but will also be required to install a 10" sewer trunk line.

AREA "B" (Good)

Area B-1 requires the installation of a new well and sewer pump station. Storm drainage is functional with some modifications required.

Area B-2 is minimally constrained and requires the water, sewer and bridge improvements discussed in Area A. Major storm drainage improvements may also be required.

Area B-3 may be required to participate in sewer line segment replacement and will be expected to contribute toward and/or install sections of a 12" water system "loop". A functional storm drain system exists adjacent to this area.

AREA "C" (Fair)

This area is dependent to a large extent upon other development occurring first. At least one additional city well will be required, a sewer pumping station and off-site improvements, and major storm drainage improvements.

Governmental Constraints

Gustine controls residential development through laws and policies which are found in the Zoning and Subdivision Codes and the General Plan. Many of the controls are mandated by State laws, such as the California Environmental Quality Act (CEQA), the Subdivision Map Act, and Planning, Zoning and Development laws. Others are discretionary actions taken by the City. The State and the City have adopted these laws and controls for the public's general welfare. In an attempt to ensure that these controls benefit local residents, the City periodically reviews and amends the Municipal Code and updates its General Plan.

In order to promote the development of affordable housing, the City allows second single family dwellings in its older R-1 zoning districts. The Planned Community Overlay can also be used to encourage low income housing development by allowing narrower streets, flexible setbacks and smaller lots and dwellings.



The process time for various land use and development requirements varies depending upon the complexity of the proposal. A small sub-division can be approved rather quickly while a large project may take as long as one to two years. These time frames are well within professional planning and development standards.

Building Permit Process

Local and State Law requires that builders of housing, non-residential structures, and infrastructure obtain building permits and pass inspections to ensure minimum standards of construction. The City currently uses the 1998 Uniform Building Code (UBC) in the permit, inspection and approval process. The City contracts with a private firm to perform its inspections, and work is completed promptly.

Building permits are handled administratively and fees are based on the UBC and the City's charges for sewer and water facility fees. Current fee information is available at City Hall. Permit processing time is usually within 10 to 15 working days and inspections are usually performed the day after receiving a contractor's request.

Infrastructure

In addition to the fees mentioned above, a developer must pay for extending infrastructure, including streets, and sewer and water lines. The City has adopted improvement standards and specifications for infrastructure construction to ensure health, safety, and durability. Improvements and zoning requirements such as streets, curbs and gutters, sidewalks, setbacks, landscaping, floor area ratio, parking etc. are considered routine requirements in most communities. Few of these public improvements are required for homes being rehabilitated, repaired, altered or expanded.

The City's Circulation Plan provides a guide for major arterials into and out of developing residential areas. Without adequate circulation, future residential and economic development could be stymied. Such infrastructure costs can sometimes be defrayed through government grants (i.e. Community Development Block Grants) if the development benefits low and moderate income residents. The City also charges the following facilities fees for subdivision development to "buy into" existing City Services:

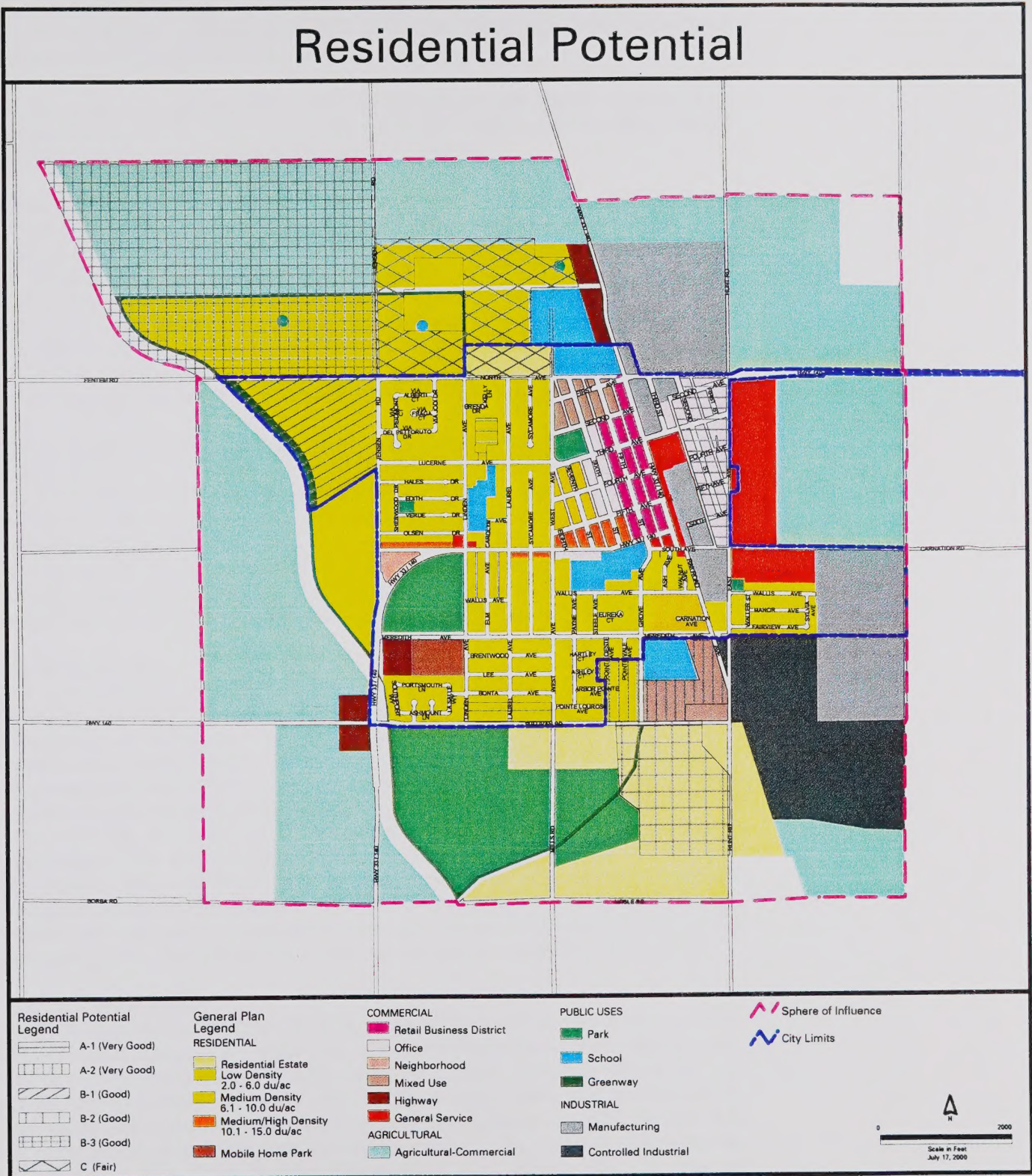
<u>Subdivision</u>	<u>Fees for City Services</u>
Sewer Development	\$3,525/Dwelling unit
Water Development	\$3,810/Dwelling unit

Public Improvements

In addition to planning fees for subdivision development, the City also requires that all public improvements be installed at the developer's expense. On existing developed sites some or all of those required improvements may be waived based on individual case evaluation by the City's Planning Commission and/or Engineer.



Map H-2: Residential Land Potential







Vacancy Rates

Vacancy rates provide a quantifiable measure of housing demand. The rule of thumb is that a 4.5 percent to 5 percent vacancy rate indicates a good balance of supply and demand in the housing market.

In the past year, the vacancy rate has dropped even lower, according to professionals in the city's real estate market. Many estimate the current vacancy rate for rentals in Gustine near zero percent.

Other Constraints

In general, land use constraints which the City has control are processing time, fees, and municipal code requirements. The City's development processing time is efficient and regulation is not excessive. The City Council, Planning Commission, and staff have traditionally worked with developers to insure that adequate and affordable housing is available by reducing development standards. While there is no organized limited-growth faction in the City, there is a general consensus that growth and development should be reasonable and well planned so as to remain an asset rather than a burden to the City.

On November 3, 1998, California voters passed Senate Bill 50, the largest school construction bill in California's history. This Bill amends Government Code Section 65995 to establish the base amount of allowable fees at \$1.93/sq ft for residential construction and \$.31/sq ft for commercial construction (which is the amount presently allowed under the statute, after inflation adjustments). These new amounts would be subject to inflation adjustment every two years. In certain circumstances, school districts could impose, in the alternative, fees calculated as prescribed in Government Code Sections 65995.5 and 65995.7.

Housing Strategy

For most projects, the City Environmental Impact Report on the General Plan should provide sufficient background information to allow granting of a Negative Declaration or a Mitigated Negative Declaration. The City should periodically review the General Plan EIR, and provide updates as necessary to insure that the document remains current. Subsequent environmental analysis conducted on a project-specific basis should add to the environmental documentation of the City, and be available for all development to draw from during project processing. The City should participate in area wide studies such as traffic and air quality. The City should also establish a basic set of mitigation measures designed to address long-term and cumulative impacts associated with growth. These basic mitigation measures can be updated regularly, and will help speed processing time and reduce the extent of subsequent environmental analysis.

Energy Conservation

In 1990, approximately 45% of all housing units were 30 years old or older. These older homes are usually less energy efficient than newer homes with more modern technology. Pacific Gas and Electric Company (P.G. & E.), the City's principal energy provider, has various energy audits and weatherization programs which residents are encouraged to participate in. In 1992 alone P.G. & E. plans to complete 1,000 weatherizations in this region, some of which may be in Gustine. The City's Building Department also insures that all new or rehabilitated units meet State energy standards. If new homes are required to



be highly energy efficient, the reduced electricity costs may help compensate for the higher costs of new housing.

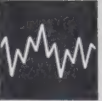
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INTRODUCTION

1.1 Purpose and Scope

The Noise Element of the General Plan is a planning document which provides a policy framework for addressing potential noise impacts encountered in the planning process.

The content of a Noise Element and the methods used in its preparation have been determined by the requirements of Section 65302 (f) of the California Government Code and by the *State of California General Plan Guidelines* published by the California Office of Planning and Research in 1990. The Guidelines require that major noise sources and areas containing noise-sensitive land uses be identified and quantified by preparing generalized noise exposure contours for current and projected conditions.

According to the Government Code requirements, noise exposure information should be included in a Noise Element for the following major noise sources:

1. Highways and freeways
2. Primary arterials and major local streets
3. Railroad operations
4. Aircraft and airport operations
5. Local industrial facilities
6. Other stationary sources

Noise-sensitive uses identified by the Government Code and by the City of Gustine include the following:

1. Residential development
2. Schools
3. Hospitals, nursing homes
4. Churches
5. Libraries

The Noise Element is directed at minimizing future noise conflicts. A noise ordinance, on the other hand, is directed at resolving existing noise conflicts. A noise ordinance may be used to address noise levels generated by existing industrial and residential uses, which are not regulated by federal or state noise level standards. The regulation of noise sources such as traffic on public roadways, railroad line operations and aircraft in flight is preempted by existing federal and/or state regulations, meaning that such sources generally may not be

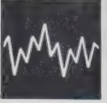


addressed by a noise ordinance. The Noise Element addresses the prevention of noise conflicts from all of these sources.

1.2 Definitions

1. A-Weighted Sound Level (dBA): Except as specified, all sound levels referred to in this policy document are in *A-weighted* decibels. A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighting, as it provides a high degree of correlation with human annoyance and health effects.
2. Community Noise Equivalent Level (CNEL): The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.
3. Day/Night Average Sound Level (L_{dn}): The average equivalent sound level during a 24-hour day, obtained after addition of ten *A-weighted* decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.
4. Equivalent Sound Level (L_{eq}): The sound level containing the same total energy as a time varying signal over a given sample period. L_{eq} is typically computed over 1, 8 and 24-hour sample periods.
5. Maximum Sound Level (L_{max}): The maximum sound level recorded during a noise event.
6. New Development: Projects requiring land use approval or building permits, but excluding remodeling or additions to existing structures.
7. Noise-Sensitive Land Use: Residential land uses, transient lodging, schools, libraries, churches, hospitals and nursing homes.
8. Outdoor Activity Areas: Patios, decks, balconies, outdoor eating areas, swimming pool areas, yards of dwellings and other areas which have been designated for outdoor activities and recreation.
9. Stationary Noise Source: Any fixed or mobile source not preempted from local control by existing federal or state regulations. Examples of such

Noise



sources include industrial and commercial facilities, and vehicle movements on private property.

10. Transportation Noise Source: Traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by existing federal or state regulations. However, the effects of noise from transportation sources may be controlled by regulating the location and design of adjacent land uses.

EXISTING AND FUTURE NOISE ENVIRONMENT

2.1 Overview of Sources

Based on the requirements of the Government Code and field studies conducted during the preparation of this document, it was determined that the following noise sources should be addressed in the Noise Element:

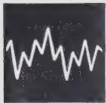
- Traffic on State Highways and Major City Roadways
- Industrial Activities

2.2 Methods Used to Develop Noise Exposure Information

According to the Government Code and General Plan Guidelines, noise exposure contours should be developed in terms of the Day-Night Average Level (L_{dn}) or Community Noise Equivalent Level (CNEL). Both of these descriptors represent the weighted energy noise level for a 24-hour day after including a 10 dB penalty for noise levels occurring at night between the hours of 10:00 p.m. and 7:00 a.m.

The CNEL descriptor additionally includes a penalty of about 5 dB for noise levels occurring during the evening hours of 7:00 p.m. and 10:00 p.m. The CNEL descriptor was developed to quantify aircraft noise, and its use is required when preparing noise exposure maps for airports within the State of California. The CNEL and L_{dn} descriptors are generally considered to be equivalent to each other for most community noise environments within ± 1.0 dB. The L_{dn} descriptor has been used in this Noise Element to quantify noise from the above-described major noise sources.

To supplement the L_{dn} noise descriptor, the hourly L_{eq} and L_{max} descriptors have been used to characterize noise levels from stationary noise sources that are addressed in this Noise Element. Because many stationary noise sources operate sporadically, the hourly L_{eq} and L_{max} are more useful for predicting noise conflicts from such sources than is the L_{dn} . The L_{dn} , by definition, is a modified



average noise exposure over 24 hours. If a noise source operates only a few hours a day, averaging the noise over 24 hours may under-estimate its nuisance potential.

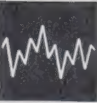
Analytical noise modeling techniques were used to develop generalized noise contours for existing and future conditions. Analytical noise modeling techniques generally use source-specific data, including descriptions of noise-generating equipment or activities, hours of operation, seasonal fluctuations, and average levels of noise from source operations. Analytical methods have been developed for many environmental noise sources, including roadways, railroad line operations, railroad yard operations, industrial plants and aircraft/airport operations. Such methods will produce reliable results as long as data inputs and assumptions are valid for the sources being studied.

The noise exposure information developed during the preparation of the Noise Element does not include all conceivable sources of industrial or commercial noise within the City of Gustine, but rather focuses on the existing sources of noise which have been identified by the City as being significant. As the policies of this Noise Element are applied in the future, it is possible that other potentially significant sources will be identified.

2.3 Roadways

The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to develop L_{dn} contours for State Highways and major City roadways. The FHWA Model is the analytical method currently favored by most state and local agencies, including Caltrans, for highway traffic noise prediction. The model is based upon reference energy emission levels for automobiles, medium trucks (2 axles) and heavy trucks (3 or more axles), with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA Model was developed to predict hourly L_{eq} values for free-flowing traffic conditions, and is generally considered to be accurate within ± 1.5 dB. The model assumes a clear view of traffic with no shielding at the receiver location. To predict L_{dn} values, it is necessary to determine the hourly distribution of traffic for a typical day and adjust the traffic volume input data to yield an equivalent hourly traffic volume. The Calven traffic noise emission curves were used as recommended by Caltrans to more accurately calculate noise levels generated by California traffic.

Existing (1998) and future (2020) traffic volumes used to calculate traffic noise levels were based on the traffic study data provided by the Merced County Association of Government (MCAG). The Day/Night distribution of traffic and



truck volumes were based on assumptions used by BBA for comparable streets, since these data were unavailable from any other source. Vehicle speeds assumed during the traffic noise modelling process were the posted vehicle speeds.

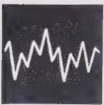
Appendices A and B show the traffic assumptions used in the FHWA Model for existing and future conditions. Appendices C and D show the distances to noise contours from roadway centers. Figures 1 and 2 show the existing and future noise contour locations on the City base map.

2.4 Major Stationary Noise Sources

The production of noise is an inherent part of many industrial, commercial and agricultural processes, even when the best available noise control technology applied. Noise production within industrial or commercial facilities is controlled indirectly by Federal and State employee health and safety regulations (OSHA and Cal-OSHA), but exterior noise emissions from such operations have the potential to exceed locally acceptable standards at nearby noise-sensitive land uses.

Stationary noise sources that were studied were selected by the City and BBA. Noise exposure information was developed from operational data obtained from source operators (when available) and noise level measurements conducted at reference locations around the noise source. Only existing noise levels are described since there are too many variables and unknown conditions to predict future noise exposure.

The following discussions provide generalized information concerning the relative noise impacts of each source, and identify specific noise sources which should be considered in the review of development proposals where potential noise conflicts could result. Not all industrial noise sources in the City are discussed. Unidentified industries or other major noise sources may exist, which could generate significant noise levels and result in noise-related land use conflicts. Generalized 50 and 55 dBA hourly L_{eq} noise contours were prepared for major stationary noise sources where it was determined that such contours would be located off the property occupied by the source. These contours are included in Figure 1 of this document. The generalized contours contained within Figure 1 should be used as a screening device to determine when potential noise-related land use conflicts may occur, and when site-specific studies may be required to properly evaluate noise at a given noise-sensitive receiver location.

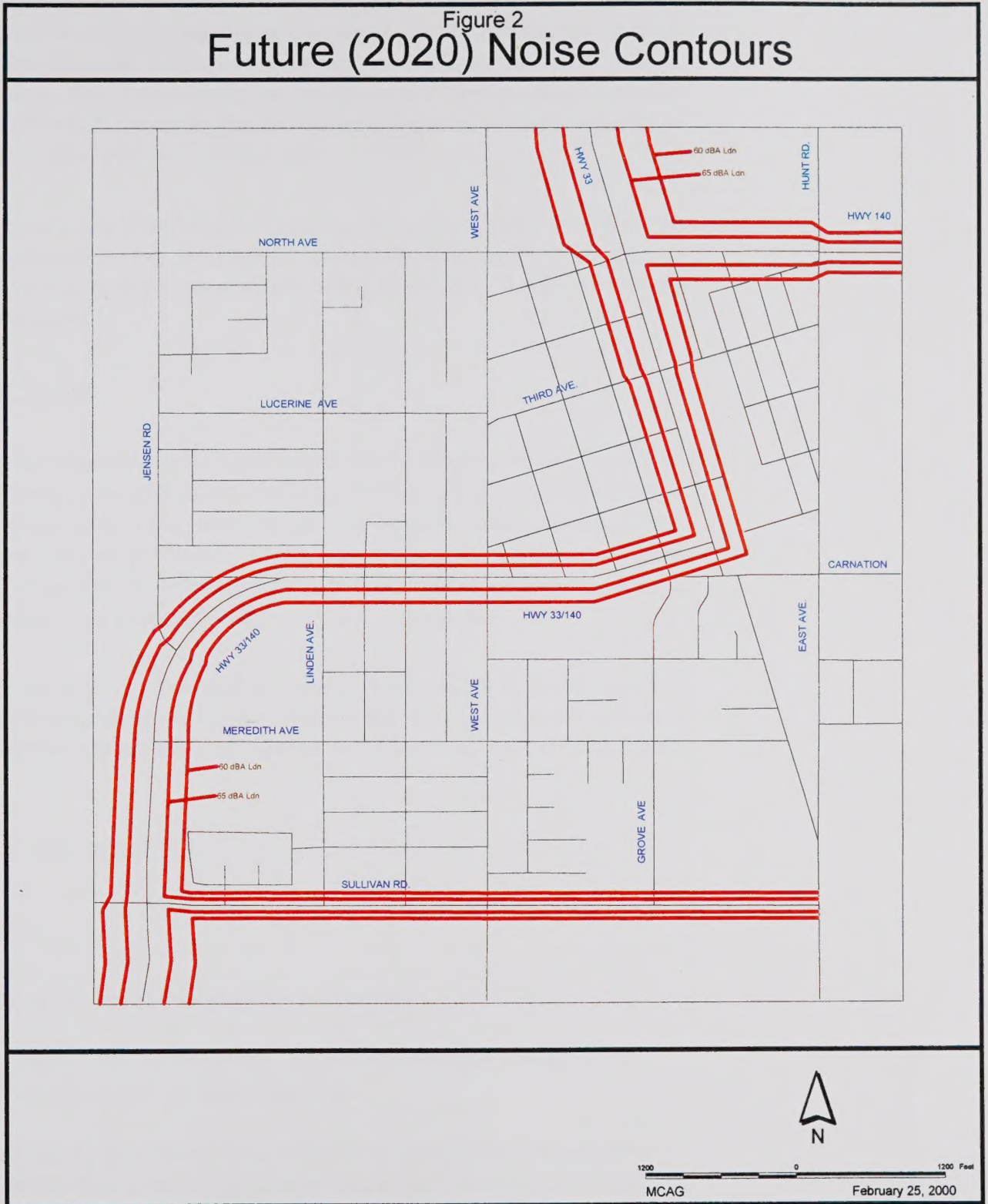


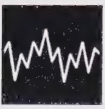
Beatrice Cheese:

This facility is located south of S.R. 33 between Second and Third Streets. The Beatrice plant processes cheese and cheese by-products. The major noise sources at the plant are cooling towers, pumps, fans, compressors and similar equipment. A residential area is located south and east of the Figure 1



Figure 2







Noise

plant. During the morning of February 12, 1999, sound level measurements were conducted at the southeast corner of Second Avenue and Second Street, which is about 120 feet from the plant's cooling tower. Sound levels at this location ranged from about 66-70 dBA, with an energy average (L_{eq}) of 68.8 dBA. Another measurement was conducted at Second Street and Fourth Avenue which is about 700 feet from the cooling tower. Sound levels at this location ranged from about 48-51 dBA, with an L_{eq} of 50.4 dBA.

This distance to the 50 and 55 dBA hourly L_{eq} contours are about 1,050 and 600 feet, respectively, using the standard assumption that sound from a point sources diminishes at the rate of 6 dB/doubling of distance. These contours are shown on Figure 1.

Avoset Foods:

This food processing plant is located east of S.R. 33 and south of Fourth Avenue. Major noise sources at the plant are fans and refrigerated trucks. A residential area is located east of the plant. Sound level measurements were conducted during the morning of February 12, 1999 at Fifth Avenue and Second Street, which is about 150 feet from the fans on the east side of the building. Sound levels ranged from about 48-51 dBA, with an L_{eq} of 50.4 dBA.

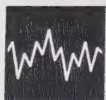
The distance to the 50 and 55 dBA hourly L_{eq} contours are about 350 and 200 feet, respectively, using the standard assumption that sound diminishes from a point source at 6 dB/doubling of distance. These contours are shown on Figure 1.

GOALS AND POLICIES

3.1 Goals

The goals of the City of Gustine Noise Element are:

1. *To protect the citizens of the City from the harmful and annoying effects of exposure to excessive noise.*
2. *To protect the economic base of the City by preventing incompatible land uses from encroaching upon existing or planned noise-producing uses.*



3. *To preserve the tranquility of residential areas by preventing noise-producing uses from encroaching upon existing or planned noise-sensitive uses.*
4. *To educate the citizens of the City concerning the effects of exposure to excessive noise and the methods available for minimizing such exposure.*

3.2 Policies

The following specific policies have been adopted by the City of Gustine to accomplish the goals of the Noise Element:

Prevention of Adverse Noise Impacts due to Transportation Noise Sources:

- Policy 3.2.1** New development of noise-sensitive land uses shall not be permitted in areas exposed to existing or projected future levels of noise from transportation noise sources which exceed 65 dB L_{dn} in outdoor activity areas or 45 dB L_{dn} in interior spaces.
- Policy 3.2.2** Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed 65 dB L_{dn} within outdoor activity areas and 45 dB L_{dn} within interior spaces of existing noise-sensitive land uses.

Prevention of Adverse Noise Impacts due to Stationary Noise Sources:

- Policy 3.2.3** New development of noise-sensitive land uses shall not be permitted where the noise level from existing stationary noise sources exceeds the noise level standards of Table I.
- Policy 3.2.4** Noise created by new proposed stationary noise sources or existing stationary noise sources which undergo modifications that may increase noise levels shall be mitigated so as not to exceed the noise level standards of Table I at noise-sensitive uses.



TABLE I

MAXIMUM ALLOWABLE NOISE EXPOSURE-STATIONARY NOISE SOURCES¹

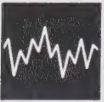
	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq} , dB	55	50
Maximum level, dB	75	70

¹As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.

IMPLEMENTATION MEASURES

To achieve compliance with the policies of the Noise Element, the City of Gustine shall undertake the following implementation program. The implementation program focuses on the prevention of new noise-related land use conflicts by requiring that new development be reviewed to determine whether it complies with the policies in Chapter 3.

- 4.1 The City shall review new public and private development proposals to determine conformance with the policies of this Noise Element.
- 4.2 The City shall require an acoustical analysis in those cases where a project potentially threatens to expose noise-sensitive land uses to excessive noise levels. The presumption of excessive noise levels shall be based on the location of new noise-sensitive uses to noise contours, or staff's professional judgement that a potential for adverse noise impacts exists. Acoustical analyses shall be required early in the review process so that noise mitigation may be included in the project design. For development



not subject to environmental review, the requirements for an acoustical analysis shall be implemented prior to the issuance of building permits.

- 4.3 The City shall develop and employ procedures to ensure that noise mitigation measures required pursuant to an acoustical analysis are implemented in the development review and building permit processes.
- 4.4 The City shall develop and employ procedures to monitor compliance with the policies of the Noise Element after completion of projects where noise mitigation measures have been required.
- 4.5 The City shall enforce the State Noise Insulation Standards (California Code of Regulations, Title 24) and Chapter 35 of the Uniform Building Code (UBC) concerning interior noise exposure for multi-family housing, hotels and motels.
- 4.6 The City shall periodically review and update the Noise Element to ensure that noise exposure information and specific policies are consistent with changing conditions within the City and with noise control regulations or policies enacted after the adoption of this element.



Introduction and Intent

The Safety Element focuses on safety issues that need to be considered when planning for growth and development. Of significant importance is protection from previously identified hazards, both natural and man-made.

The Safety Element is required by state law and is consistent with other chapters of the General Plan. The intent of this element is to identify and respond to potential hazards due to seismic activity, flooding, etc. The Safety Element establishes goals, objectives, policies, and actions to direct local government in making decisions relating to the safety of the community.

In addition, this Element includes policies that foster coordination between local, state, and federal agencies charged with insuring the safety of the community.

Setting

Hazards refer to natural or manmade conditions which have the potential to threaten life, cause injury, or cause property damage. Disasters refer to specific events that occur due to the interaction between hazards and human populations. Through investigation of hazard risks and prudent land use planning to reduce or restrict development in areas with the highest risks, the potential for disaster can be reduced.

Through sensible design of new development and emergency preparedness, risks from these hazards or their effects can also be reduced.



Goals and Policies

SAFETY

Protect the Gustine Community from Hazards Associated with the Natural Environment

Policy

Minimize risks of personal injury and property damage associated with natural hazards

Actions

- 1) Educate the community on procedures regarding preparedness and response to natural disasters, providing information describing procedures and evacuation routes to be followed in the event of a disaster.
- 2) Address the need for future evacuation routes as a component of the street construction and improvement programs of the City and other relevant agencies.

Policy

Mitigate potential adverse impacts of geologic and seismic hazards.

Actions

Require the underground utilities be designed to withstand seismic forces

Protection of the public and environments from exposure to hazardous materials and hazardous waste.

Policy

Assess risks involving the disposal, transport, manufacture, storage, and handling of hazardous materials at all levels of planning in the City of Gustine

Actions

- 1) Coordinate with Merced County and Merced County Association of Governments to provide educational opportunities for generators of small quantity, household and agricultural waste products regarding their responsibilities for source reduction and proper and safe hazardous waste management.
- 2) Adopt current versions of the Uniform Fire code to regulate the storage of hazardous substances
- 3) Identify potential users and producers of hazardous materials at the time of permit application and mitigate dangers associated with these materials.



Seismic Safety

Earthquakes

"Earthquakes are a part of California's heritage and we all must learn to live with them, but the dangers involved are more a result of man's ignorance than of nature's destructive force."

--Robert Lacopi

The State of California has a long history of seismic activity. Faulting and associated earthquakes have played an active role in the development of California's landscape through geologic time. The earliest known account of seismic activity during recorded history dates back to the late 1700's. In 1769, the expedition of Gaspar de Portola was violently shaken by a large earthquake while camped on the Santa Ana River near the present town of Olive. The heavy shaking reportedly threw the river out of its channel, and many men and horses were knocked to the ground.

If in the future an earthquake of significant magnitude should occur, it could cause casualties and extensive property damage in Gustine. Fire is a secondary effect that could add to the turmoil.

In the Loma Prieta Earthquake (1989), much of the personal economic hardship realized may have been avoided if the individuals affected had properly prepared for such an event. Most of the deaths, however, were beyond the scope of personal preparedness. In Santa Cruz, several died when adjacent buildings collapsed onto their buildings. In San Francisco, a double-decked freeway collapsed killing many commuters.

An earthquake is a perceptible trembling to violent shaking of the ground produced by the sudden displacement of rocks below the earth's surface. Earthquake activity can include severe ground settling, dam failure, and landslides, but most people equate earthquakes with the movement of the earth along a fault.

California receives thousands of shocks each year, and of these approximately 500 are large enough to be felt by many people. Many areas seem to experience "cycles" of earthquakes where large quakes may not be felt for a matter of time, and then several may occur in a relatively short period of time. In the greater Bay Area, for example, where fault activity is frequent enough to reveal a possible cycle, there were 18 medium to large earthquakes between 1836 and 1911, no medium to large quakes from 1911 to 1979, and in the 16 years since 1979, four medium to large quakes have occurred.

The Telsa-Ortogonal Fault has not been historically active, but there is no assurance that it will not become active in the future. It is unlikely that Gustine will ever be an earthquake epicenter, however, earthquakes originating elsewhere will continue to shake the City and, as the population grows, more people will be subject to these impacts.



The amount of damage to structures from an earthquake is determined by several factors: (1) distance from the earthquake epicenter; (2) nature of the ground (i.e., buildings of essentially equivalent construction will be more severely damaged if they are on filled or unconsolidated ground with a water table within 50 feet of the surface; (3) type of construction (e.g., precast concrete, unreinforced masonry, reinforced concrete frame, and older types of construction along with inflexible pipes and tubing generally are more severely damaged by earth shaking); and, (4) the duration of the shaking.

Liquefaction & Tectonic Subsidence

The potential for liquefaction decreases as the groundwater depth decreases, and is considered to be unlikely where the groundwater depth exceeds 30 feet. As mentioned earlier, ground shaking can result in soil settlement or sinking. If the sediments, which compact during an earthquake are saturated, water within the soil is forced to the surface, where it emerges in the form of mud spouts or sand boils. If the soil liquefies in this manner (liquefaction), it loses its ability to support structures causing them to sink into the earth. The degree of settlement damage can vary from minor to total collapse. Soil types such as Agnal and Kesterson are potentially dangerous because of wetness and ponding. The City is interested in minimizing property losses resulting from liquefaction. One of the ways it has done this is by creating a planning boundary (SOI) which directs urban development away from liquefaction prone soils.

Hazardous Buildings

The State Division of Mines and Geology has designated the Gustine area with a Maximum Expectable Earthquake Intensity of "High Severity Major Probable Damage" (S-1). These "intensity zones" identify the severity of damage expected should an earthquake occur. New development will be required to comply with current building standards for seismic safety. Older buildings will be rehabilitated as an ongoing program for improving the City's housing stock.

Potential Dam Failure

Gustine will be unaffected by Dam failure unless significant growth were to occur further to the east, which is unlikely. The Federal government has made substantial improvements to the O'Neill Dam which further reduces the dam inundation potential to areas in the vicinity of Gustine.

The City coordinates with the local branch of the State OES for an early warning system which diverts east bound traffic in the event of Dam failures.

Flooding

Most floods in Merced County are produced by extended periods of rainfall during the winter months. This is the time of year when an adequate surface drainage system is critical. Further development will contribute to the surface drainage problem, therefore the City plans to minimize the potential for flooding and flood damage. (See Flood Control, Open Space/Conservation Element).



The extent of future development being proposed in this update will increase the amount of storm water run off and necessitate a Storm Drain Master Plan and negotiations with the Central California Irrigation District (CCID) to accept storm water as required. CCID has indicated that they will review a master plan proposed by the City and work cooperatively to accomplish mutual goals. The City will continue to require development to provide storm drain storage and pumping facilities. Facilities should include conventional, motorized back-up pumps in cases of power failure during storms.

Aquatic Insect Problem

The expansion of the Wastewater Treatment Plant (Alternative IIAI) will retain additional seasonal waters and when combined with increased residential development there will be a potential for mosquito nuisance and related health problems.

The City will develop a management strategy to respond to residential complaints regarding mosquito problems in cooperation with the Merced County Mosquito Abatement District, U.S. Fish and Wildlife Service, California Department of Fish and Game and the Grasslands Water District.

Circulation Safety

As growth occurs and vehicle trips increase, the potential for traffic accidents and injury will also increase. The City will need to coordinate with the County and State to create effective road systems and transitions.

Safe travel will continue to be provided for vehicles and pedestrians. Cross walks will provide access across busy Highways 33 and 140, as well as, major arterials and into public facilities such as schools. Elementary schools will render additional pedestrian safety by providing crossing guards for children. A pedestrian overpass over State Highway 33 is also being contemplated.

Canals and Drainage Ponds

Canals and drainage ponds throughout the City will continue to be a safety risk. This risk may increase with the location of bike trails on canal rights-of-way and the adoption of mixed-use drainage basins/parks.

If pedestrian/bike trails are established adjacent to canals the potential for hazard will increase and fences will be located to separate the trails from the canal waterway. Also if a joint use for drainage basins and parks is implemented basins will be required to be much more shallow, therefore reducing the threat of drowning.

Emergency Plan

In the future the Emergency Plan area will include the expansion of the City's Sphere of Influence.

Currently, an Emergency Plan needs to be completed. The updated Emergency Operations Plan should reflect current OES requirements and be consistent with the County "Multi-Hazard Functional Plan". As Gustine's Sphere of Influence expands, the plan will be revised to include boundary expansions.



Urban & Wildland Fires

As the Gustine Planning Area and population expand, more volunteer fire fighters will be required. The City will endeavor to maintain an ISO rating of 4 or better as new development occurs.

The continued growth of Gustine as a whole, the increased use of hazardous materials, geographic constraints such as creeks, the condition of older buildings in downtown Gustine, and the extensive use of shake shingle roofs create a wide spectrum of fire safety concerns. When planning for urban fire protection, fire risk factors and their mitigation, as well as hazard response factors must be considered.

Risk Factors and Mitigation

Urban fire risks include personal safety practices, construction materials and methods, built-in fire protection systems, site-planning and overall land use.

Personal Safety Practices

Gustine's current number one cause of residential fires is cooking. Kitchen safety revolves mainly around an individual's safety practices. For this reason, the Fire Department will develop public education programs. These programs stress emphasis on children and senior citizens who have been identified by the National Fire Protection Agency as high-risk groups for fire death and injuries.

Construction Materials, Methods and Site Planning

The Uniform Building Code (UBC) and the Uniform Fire Code (UFC) work together as companion documents to regulate building construction and related items such as the care of vacant lots and the storage of flammable liquids. Generally, the UBC regulates new construction and the UFC covers the maintenance of the construction. Each year the Fire Prevention Bureau and engine companies conduct inspections and eliminate Uniform Fire Code violations that could attribute to the cause and severity of a fire. The inspection program primarily targets the high and medium hazard occupancies identified in the "Land Use" section on the following pages. To provide effective fire prevention activities for low hazard land uses, the City of Gustine conducts year-round hazard removal programs (primarily weed abatement).

Vacant Lots

Vacant lots that are overgrown with weeds or allow the buildup of refuse are a fire hazard, especially during the hot, dry summer season.

The City of Gustine currently has a weed control program that requires weed abatement during the year. Each property within the City is served annually each spring with a notice sent for removal of weeds, etc. The City Police Department also picks up abandoned vehicles, and a "Spring Clean-up" conducted annually allows people to have bulky refuse picked up without charge.



Naturally, the use of built-in protection such as fire resistant materials and automatic sprinklers in all structures above that required by the Uniform Building and Fire Codes significantly reduces the risk of urban fires and may reduce the City's reliance upon fire suppression crews.

Land Use

Gustine has a variety of land use types. Many of these require tailored fire protection considerations. These land uses are included as follows:

High-Hazard Occupancies

(schools, nursing homes, and other high life hazard or large fire potential occupancies)

Medium-Hazard Occupancies

(apartments, offices, mercantile and industrial occupancies)

Low-Hazard Occupancies

(one-, two-, or three-family dwellings and scattered small businesses)

Rural Operations

(scattered dwellings, outbuildings, vacant lots)

Each of these land use types requires somewhat different fire suppression resources (e.g., emergency medical services, hazardous materials response, and heavy rescue). Gustine's current policy is to provide emergency response within 4 to 6 minutes and to provide adequate resources to combat fires in these occupancies. The target of this response is to place a fire unit on scene at 95 percent of incidents in five minutes. Therefore, it is important that those industries using hazardous materials, large facilities, or requiring special fire hazard considerations going into new areas of the City not currently occupied by these types of businesses be accompanied by additional fire department equipment and/or personnel.

Wildland Fires

Wildland fire hazards exist in varying degrees over approximately 90 percent of Merced County, mostly outside urban areas. The Valley's long, dry summers and extensive vegetation makes for a fire season that extends from late spring to early fall. Approximately fifty to one hundred wildland fires can occur in Merced County in any one year. Irrigated agricultural land, however, is less susceptible to wildland fires than grazing areas.

As the City has increasingly annexed large blocks of undeveloped land, the potential for wildland fires (mainly grassland fires) within the City has increased.

The Fire Department is also frequently called to provide mutual aid to the County for grassland fires in the wider Merced area due to increasingly strained fire-fighting resources within the County over the last few years.

Peak load Water Supply Requirements

The total water storage required is the amount needed to fight a fire at the flow rate of 2,000 gpm for 2 hours plus the 24 hour maximum domestic consumption of the City. As was mentioned in the Circulation Chapter, the combined capacity



of the City's wells is 2,700 gallons per minute. As population increases this demand deficit will also grow unless new wells and/or storage facilities are provided.

Access

Access, as it relates to urban fires, is promoted or restricted based on three factors: (1) the geographical proximity of the proper equipment, (2) the location of physical boundaries in relationship to the station and fire, and (3) the road system. The proximity of the proper equipment is discussed in the land use portion of the "Risks Factors and Mitigation" section of this chapter.

A well-defined system of local streets and roads is also important to provide emergency access for fire fighting equipment and evacuation routes for the public. The circulation system is a critical part of the Fire Department's ability to maintain a desired response time of four to six minutes to any area of the City. To provide adequate access and room for fire fighting operations, the National Fire Protection Association recommends minimum roadway widths of 28 feet with parking on one side only and 36 feet if parking is allowed on both sides. Provision of bridges over creeks and grade separated railroad crossings are also critical elements in meeting response times.

The access system will also serve as an evacuation route for the population in the event of a hazardous materials incident, flood, or other disaster.

At present, the Merced Fire Department currently holds a Class 4 ISO rating. This rating schedule is used by the Insurance Service Office (ISO) to establish insurance rates for commercial and residential properties. The fire department has eighteen volunteer fire fighters.

Water Supply

The ability to provide an adequate water supply during peak load hours is critical for fire fighting operations. This is especially important in large commercial and industrial buildings. The water supply system currently consists of three wells and one storage tank that holds 75,000 gallons of water. The City currently expanding and will add one more well to its system. The water that is released from the water tank releases water at 50-55 psi water pressure.

The City is required to meet State Health pressure requirements, which call for a minimum of 20 psi at every service connection under the annual peak hour condition and maintaining the annual average day demand plus fire flow. Through a Capital Improvement Program, the City plans to increase water wells to match the requirements of development.

The importance of expanding the water supply and distribution system increases greatly as the City expands. In addition to providing water supplies for fire suppression forces, the effectiveness of automatic fire sprinkler systems is dependent upon the water service. Fire sprinkler systems are designed based on pressures and water flow from the public water main. If the minimum required pressure and available water supply are not maintained, the sprinkler system will not operate properly. The City contracts its water services who maintain a computer model to assist in the analysis of water system changes, so that production facilities in the most appropriate locations, identify system



improvements needed to support specific development projects, and improve maintenance and reconstruction techniques could be added if necessary.

The City of Gustine Fire Department has a mutual aid agreement with the City of Newman in Stanislaus County and the Merced County Fire Department. This agreement enables the different jurisdictions to request aid from another when necessary.

Evacuation Routes

Evacuation routes have been discussed for particular hazards under each of the previous hazard response sections, but some general items must be noted. Earthquakes, fires, and flooding can all necessitate evacuation. However, it is not possible to know with certainty how many people will actually need to be evacuated in any given situation. Similarly, the rate at which people will evacuate and their specific routes of travel and ultimate destinations are subject to wide variation. Therefore, in the case of an emergency, it is necessary to evaluate each situation on an individual basis and respond accordingly.

Crime

There are many different causes of crime, requiring many different approaches. Continuing crime prevention programs in Gustine include educational outreach, the Explorers program, and data tracking to identify high-crime areas, traffic problems, and service requirements of various neighborhoods. In 1999, the Gustine Police Department has 7 sworn officers, 1 non-sworn positions, and 3 reserves.

By the year 2010 it is expected that 16 new officers will be required totaling 22, as well as 8 additional fully marked cars. This will continue to insure a low crime rate within the City.

Hazardous Waste

California's economic well being and quality of life depend in many ways on the production and use of manufactured goods. However, manufacturing often requires large volumes of chemicals and generates hazardous waste. Hazardous waste ranges from familiar substances, such as solvents and waste oil, to sophisticated compounds such as polychlorinated biphenyls and dioxins. More than 10 million tons of hazardous waste are generated in California each year. In 1986, 4.3 tons were generated in Merced County alone.

In 1986, the California legislature passed legislation requiring each county to develop a hazardous waste management plan and requiring all cities to either adopt the County plan by reference in their general plans or adopt their own plan. In January 1989, the Merced County Board of Supervisors adopted the Merced County Hazardous Waste Management Plan. The plan addresses waste reduction and onsite treatment, the siting of off-site hazardous waste facilities, public and industry education, transportation of hazardous wastes, cleanup of contaminated sites, and emergency response procedures. The plan also recommends a series of goals, policies, and implementation actions to deal with hazardous waste throughout the County.

The Merced County Environmental Health Division, which oversees the enforcement of the plan, maintains an up-to-date list of known hazardous waste sites within the County. Cleanup of sites that exceed State standards for



contamination by toxic materials is required prior to development or reuse of the site. The State Department of Health Services monitors the cleanup process.

The Gustine Fire Department and Environmental Health Division work with the County to prevent the uncontrolled release of toxic substances into the environment by conducting inspections of toxic materials facilities, enforcing storage and use requirements, and educating local businesses on proper storage and handling of hazardous materials. The Gustine Fire Department responds to uncontrolled releases within the City limits, identifies the category of chemicals involved, contains the spill if possible, oversees cleanup activities, and makes sure that the site is safe to be occupied again.

The County Hazardous Waste Management Plan deals with detailed emergency response procedures under various conditions for hazardous materials spills. The City also works with the State Department of Health Services to establish cleanup plans and to monitor the cleanup of known hazardous waste sites within the City.

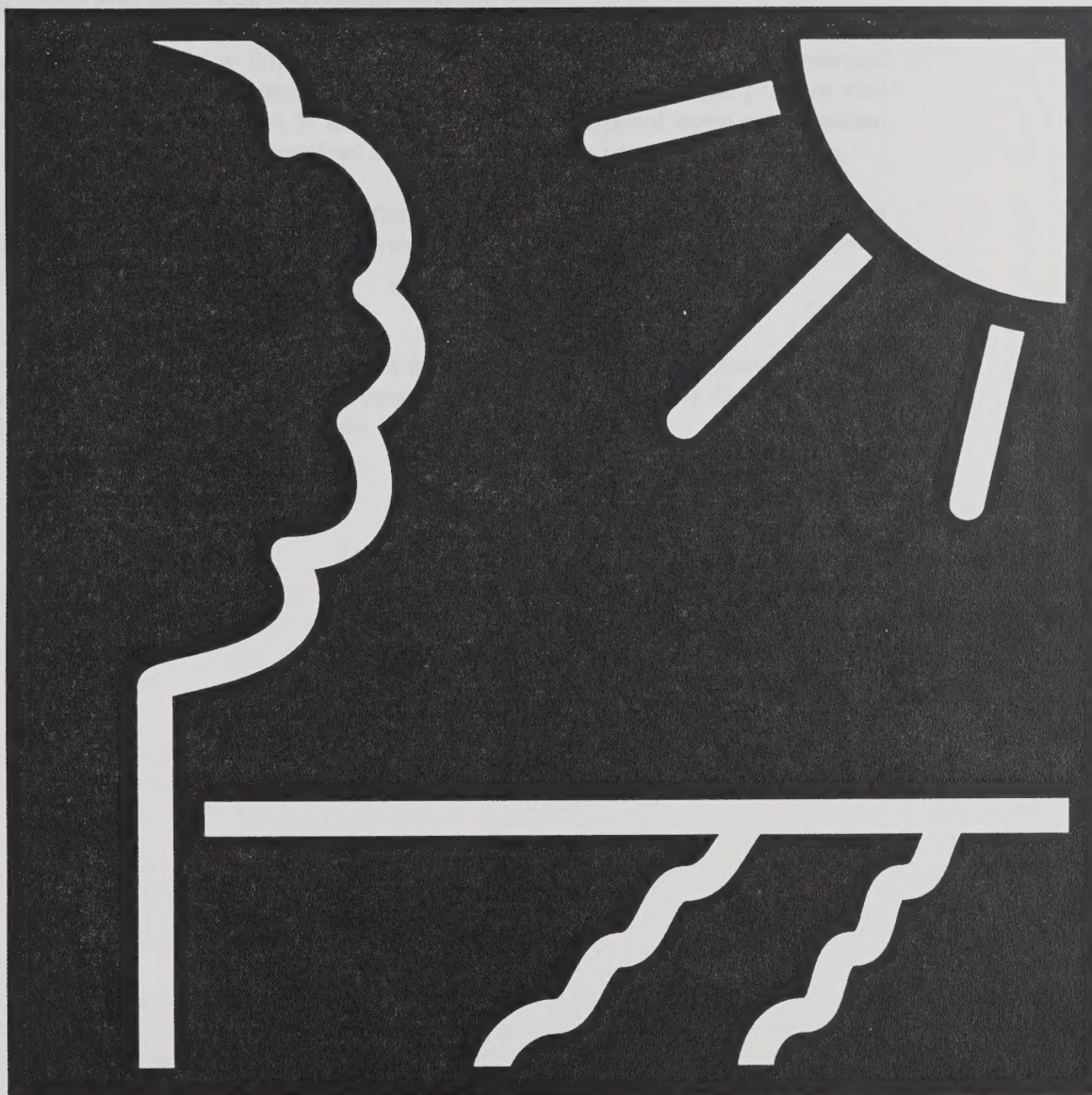
Areas within the Gustine SOI which have a greater potential for being affected by hazardous materials are sites near existing underground storage tanks, the Highway 33 and 140 corridors, and areas adjacent to gas lines. The most common type of hazardous problem in Gustine is related to underground storage tanks that have leaks. At the present time 14 locations have been identified as hazardous waste sites. For this county, agricultural chemicals, which are routinely stored and transported, are the most common types of hazardous materials. Earthquakes increase the risk of hazardous material spills.

The City will routinely require development to strictly adhere to UBC requirements for the construction of storage facilities and will also develop a local emergency response plan for spills. As a matter of policy the city will require Hazardous Material disclosure from all commercial and industrial developments. There are nineteen such disclosures on file with Merced County Environmental Health.

Safety Prevention

Residents pride themselves in the safe living environment that prevails in the Gustine community. The City will continue to provide adequate levels of fire and police services necessary to maintain this environment.

CHAPTER 11 OPEN SPACE





Introduction and Intent

The Open Space/Conservation Element establishes a framework for insured protection of valuable open space lands for the purposes of natural drainage, scenic beauty, agricultural preservation, and community health.

Government Code Section 65302(d) requires that all General Plans include a "...Conservation Element for the Conservation, development and utilization of natural resources including water and its hydraulic force, forests, soil, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources." The most significant conservation issues relating to Gustine include, water resources, and soils- addressed as agricultural lands.

Open-space land is a limited valuable resource which must be conserved whenever possible; and assurance that every city and county will prepare and carry out open space plans in addition to state and regional open space plans, thus, accomplishing the objectives of a comprehensive open space program.

Recreation is not a mandated element of the General Plan; however, policies relating to recreation are included in this chapter in an effort to provide sufficient parkland for residents.

Setting

Agriculture and residential issues are currently the primary land use in Gustine and Gustine's SOI. Vacant and open space lands within the City consist of publicly and privately owned lands.

**Goals, Objectives, and Policies****OPEN SPACE, CONSERVATION, & RECREATION****Conservation**

Attainment and maintenance of Ambient Surface and Groundwater Quality Standards

Policy

The City shall control the amount and quality of non-point source pollution

Actions

- 1) Educate the public regarding water quality, runoff, and drainage effects
- 2) Monitor storm drainage and wastewater disposal impacts and provide appropriate mitigation

Open Space for Recreational Use**Policy**

A comprehensive system of parks to meet a range of recreational uses

Actions

- 1) The City shall be responsible for preparing a Parks and Recreation master Plan which a) established funding sources b) adopts standards and c) addresses maintenance issues
- 2) Identify specific sites for neighborhood parks within Specific Plan Areas as part of the specific plans required for development

Policy

Ensure adequate funding sources for acquisition, operation, and maintenance of recreation facilities

Actions

- 1) Require the dedication, improvement, and/or fees for parkland
- 2) Develop fiscal criteria for the effective allocation of public resources for park and recreation facilities
- 3) Identify new sources for funding for park and recreation facilities
- 4) The City should budget sufficient funds specifically for parks and recreation facility maintenance

Open Space for Management of Agricultural Resources

Preservation of agricultural resources and promotion of technical agricultural resources and opportunities

Limit encroachment of urban uses into agricultural areas, unless consistent with General Plan policies

Actions

Permanent open space and agricultural buffers around SUDP

Parks and Recreation

City parks in Gustine are divided into four types; neighborhood, community, regional and greenways. The concept of four types, or hierarchy, provides for park and recreation needs at varying levels; however, there is some overlap among the various types of parks and their uses. Translated into physical form, they create a system of parks.



The first three types provide active play space. Greenways connect various sites with exclusive paths for pedestrians and bicyclists, helping to link the parks into a system and the park system into the lives of Gustine residents. Beyond the city parks are regional parks serving many communities, which are generally provided for by the County of Merced.

Neighborhood Parks serve a large area and have a wide variety of facilities to serve a larger and more diverse population. Facilities within neighborhood parks vary depending on the recreational resources available in the neighborhood. Some neighborhoods may have school facilities that supplement the City's park facilities resources. In some instances, neighborhood park facilities approach community park standards (i.e., swimming pool, lighted baseball diamonds and community meeting hall). Although there is a hierarchy to parks, there also exists certain overlap among the different levels of parks and their uses.

Community Parks serve significant portions of urban area based on size and type of facilities. As a minimum, a Community Park serves several neighborhoods and, depending on population density, from 15,000 to 20,000 people. A community park is the nucleus of the park system and is usually the location where members of the community congregate for citywide functions or programs.

The Community Park is usually over 15 acres in size and includes neighborhood playground facilities as well as appropriate facilities for citywide use. Or, it may be more open space oriented providing the community a break within the urban environment or contact with nature and pleasant surroundings in which to engage in a variety of active and passive recreational activities.

Features of a community park may include large picnic areas, swimming pool, baseball diamonds, nature trails, soccer fields, playgrounds, zoo, community building or other citywide activity areas. Henry Miller Park is a community park.

Greenways connect the various park sites with paths exclusively for pedestrians and bicyclists. Greenways weave through the residential neighborhoods connecting larger public uses (schools, open space, and commercial uses) and provide many points of physical and visual access to the park sites. Some greenways may also act as mini-parks because of play and exercise equipment placed along the paths. Other greenways act as valuable open space greenbelts through a neighborhood.

Regional Parks such as Schmidt Park serve many cities and are sometimes used as resting stops for travelers. Often the focal point of a regional park is a lake, river or other natural resources. Typically counties and the state provide regional parks. If distant from an urban area, their accessibility is generally limited to those who can drive.

Throughout the identification of the needs process, Gustine community members identified the need to have adequate recreation facilities for its youth. While as





indicated, the park/person ratio in Gustine is significantly higher in Gustine, adequate facilities for various user types has been identified as a goal.

The City of Gustine has four parks. They are Harry Schmidt Park, a regional park, Henry Miller Park, a community park, and Pioneer and Sherwood parks, both neighborhood parks. Table OS-1 illustrates existing parks, proposed new parks, and planned improvements to facilities.

Map OS-1 shows the existing and proposed new park facilities. The General Plan designates "floating" parks to plan for community and neighborhood parks but that will fit most effectively with new residential subdivisions. In addition, the future school site is proposed as a floating site to most effectively utilize future development patterns and allow for flexibility.

Outdoor Recreation

New park sites will be necessary as the population grows. In the year 2010 there should be a minimum of 54 acres of dedicated park land based on population projections. The addition of new parks would also increase City maintenance costs.

In addition to the social need for additional parks, the criteria that should be considered as they are cited include; joint uses such as strip parks and bike paths along canal reservations, detention basin-park development, and development of parks and recreational facilities in conjunction with the Gustine Unified School District.

Currently within the proposed Sphere of Influence boundary there are approximately 44 acres of existing parkland. If the maximum five acre per 1,000 person standard is required, then an additional 17.3 acres should be acquired for parkland to be planned before the year 2,010.

This figure may result in the creation of neighborhood parks within residential areas. Additional recreational land uses may be necessary such as golf courses and playing fields unless these can be provided at school sites.

New City parks used in conjunction with detention basins would provide a more aesthetically pleasing method of drainage control. This is one alternative for development of neighborhood parks within new subdivisions. A variation of this would be to convert existing detention basins to joint detention basin/park facilities. In order to accomplish this detention basins would have to be shallow and could not retain water continuously throughout the year.

Cooperative park and school facilities development would allow the City to establish park and recreation facilities in collaboration with the development of new school sites. While joint development of facilities would ensure more efficient use of recreational investments, it poses some limitations on site location and types of facilities.



Map OS-1: Planned parks

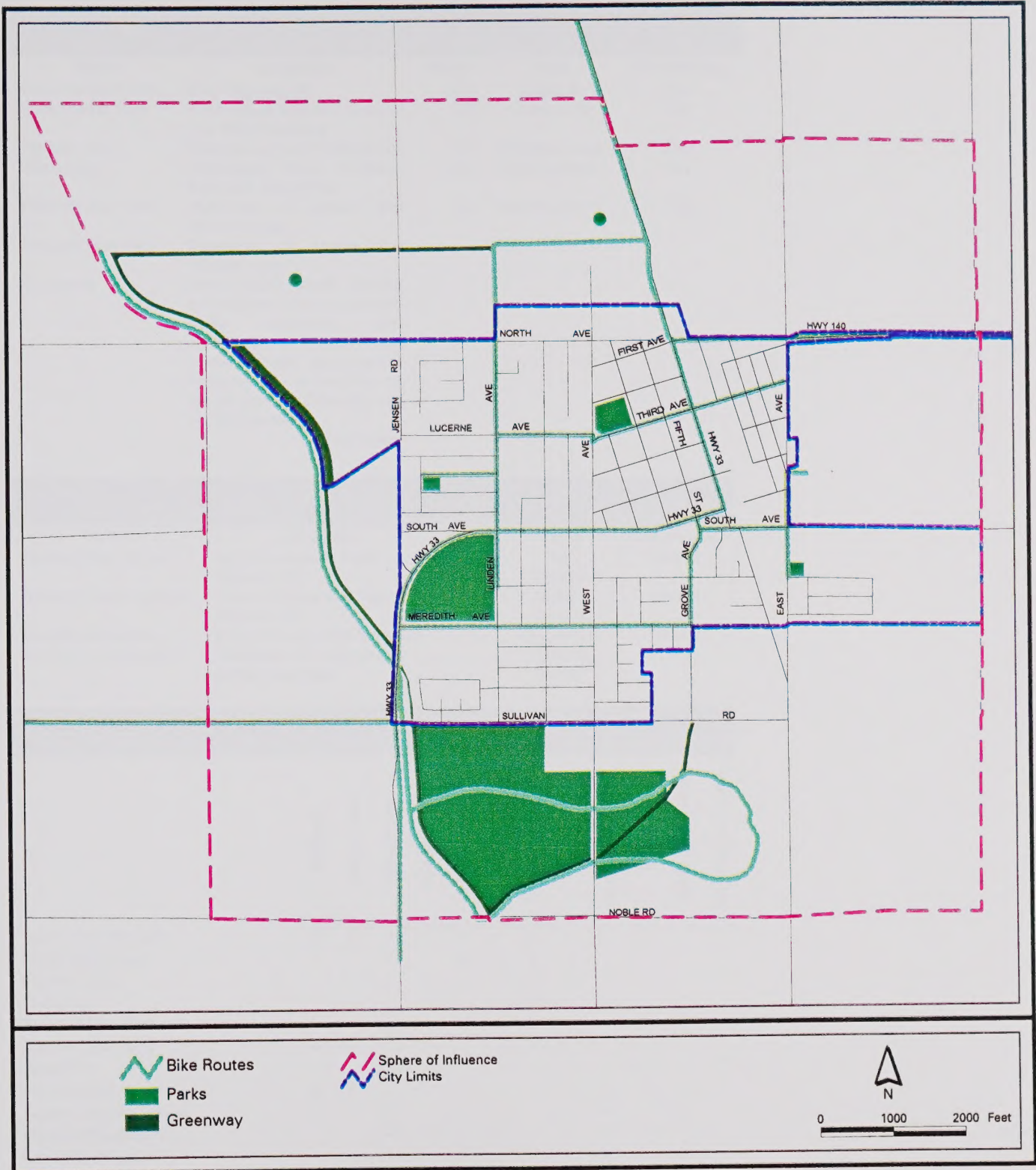






Table OS-1: Existing and Proposed Parks and Planned Improvement Facilities

Parks				
Name	Location	Acres	Type	Ownership
Harry Schmidt Park	State highway 33	28.8	Regional	City
Henry Miller Park	Sixth Street between Second and Third Avenues	4.5	Community	City
Pioneer Park	East Avenue and Wallis Road	1.1	Neighborhood	City
Sherwood	Sherwood Drive between Edith and Verde Drs.	1.2	Neighborhood	City
Planned New Park	Northwest of Jensen and Fentem Road	5.0	Neighborhood	City
Planned New Park	Southwest of Jensen and Fentem roads			
Greenway	Along CCID canal making connections to new planned parks northwest and southwest of Jensen and Fentem Roads, south across highway 33, connecting to Grove, right on Meredith, left on Fifth Avenue			
Total acres				

Schools				
Name	Location	Acres	Type	Ownership
Gustine High School	North Avenue at State Highway 33	9	High School	District
Gustine Middle School	Grove Avenue and State Highway 33	5.3	Middle School	District
Gustine Elementary	Grove Avenue and Meredith		Elementary	District
Our Lady of Miracles	Southeast of Lucerne and Linden Avenues		Catholic School	Private

Facilities										
	Ballfield	Tennis Court	Playground	Horseshoe Pits	Picnic Area	Shelter	Restroom	Pool	Basketball Court	Stadium
Harry Schmidt Park	2	4	✓	✓	✓	✓	✓			
Henry Miller Park			✓		✓	✓	✓	✓		
Pioneer Park						✓	✓		✓	
Sherwood							✓			
Planned New Park	✓		✓				✓			
Planned new park	✓		✓				✓			
Greenway										
Gustine High School	2	✓							✓	✓
Gustine Middle School	1		✓						✓	✓
Gustine Elementary			✓						✓	
Our Lady of Miracles			✓						✓	✓



Agriculture

Agriculture is the major economic force throughout the entire county of Merced. The Gustine community recognizes the inherent need to continue to preserve agricultural lands as urban expansion occurs within the Gustine SOI. Furthermore, the City has elected to protect viable ag lands through the use of a buffer zone that surrounds the City.

Wetlands

According to the Fish and Wildlife Service, the area east of Santa Fe Grade represents a significant wetlands complex, is designated Merced County sensitive habitat area, and is the Service's West Grasslands Wildlife Management Area. Grassland personnel have noted that there are a significant amount of wetlands west of Santa Fe Grade toward the City of Gustine. Wetlands exist immediately east of, and possible on, the proposed wastewater treatment plant site.

The City's proposed Sphere boundary is west of the wetlands and the only "urban" development currently planned is the expansion of its wastewater treatment facility.

The Gustine SOI is well outside of the mixed wetland and upland area discussed earlier. However, the City is negotiating to buy land outside of its SOI in order to expand its wastewater treatment facility. The wastewater facility properly developed and managed will maintain and enhance the outstanding natural biological value of the area, therefore, the City does not anticipate any significant impacts. The plant may need to be expanded again after the year 2010, however there should be adequate area in current land acquisitions to accommodate additional growth without jeopardizing wetlands.

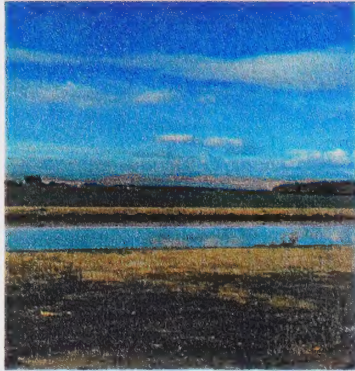
Plant and Wildlife

There is a possibility that some scarce plants and wildlife could reoccupy fallow farmlands which are uncultivated for many years. Sensitive plants and wildlife may be found in flats, marshes, and adjacent fallow farmland. The Department of Fish and Game in Table OS-2 have identified possible endangered and threatened plants and wildlife, which could re-inhabit these areas.

The long-term impacts of expanding the Gustine SOI are not judged to be significant to plant and wildlife habitat provided land within the SOI is not left fallow for long periods of time. In order to preclude the reestablishment of wildlife habitat within areas designated for future urban development, the City should encourage agricultural cultivation. Where this practice fails, or there is some question about the presence of endangered plant or animal species, the City should require new development in outlying areas to perform a biological inventory as part of a General Plan amendment, annexation or as part of a specific plan.

Soils

As development occurs, the amount of agricultural land within the Sphere of Influence will decrease, therefore contemporary agricultural practices will need to be carefully applied to avoid contaminating the remaining soil as long as it is cultivated. Future development may also result in soil contamination from urban sources. The development proposed in the Land Use Element will eliminate some soil as a valuable local resource.





Some soils are not suitable for recreational uses due to ponding, wetness, slow percolation rate, excess sodium, erosion potential, and a high clay content, so soils should be tested before recreational development occurs.

The majority of the soils have severe shrink-swell problems that limit the location of dwellings with or without basements, as well as, commercial buildings, streets and roads. Because of this, soils need to be examined before development occurs and proper engineering should be applied. Due to ponding, or too much sodium, topsoil for landscaping may have to be imported in some areas.

Agricultural Lands

As the City grows, it is inevitable that agricultural land will be converted to an urban use within the City's Sphere of Influence.

The City's objective for areas inside of the SOI will be to preserve prime agriculture and producing farmland until such time as other non-prime farmland is exhausted. Since consistency between the County and City Plans is imperative for successful implementation, it has been recommended that the City of Gustine adopt the policies of the Merced County General Plan where they apply to the City's future SOI expansion. These policies invoke the use of specific criteria for enlarging and/or adjusting the Gustine SOI boundary for improving the viability of agricultural operations and promoting the conservation of agricultural lands.

Agricultural lands that should be considered for conservation are those with Capability Class I and II soils as defined by the SCS Survey (which is the basis for identifying prime ag soils on the State Important Farmlands Map). Also, poor soils which are producing agricultural commodities should be appraised for purposes of conservation.



Table OS-2 Listed Endangered and Threatened Species and Candidate Species that May Occur in the Area of the Proposed General Plan for the City of Gustine, Merced County, California

Listed Species	
Birds	
(1) Bald eagle (<i>Haliaeetus leucocephalus</i>) (E)	
(2) Aleutian Canada goose (<i>Branta canadensis leucopareia</i>) (E)	
Invertebrates	
Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>) (T)	
Candidate Species	
Birds	
(1) Tricolored Blackbird (<i>Agelaius tricolor</i>) (b)	
(2) White-faced ibis (<i>Plegadis Chihi</i>) (b)	
Mammals	
(1) Greater Western Mastiff-Bat (<i>Eumops perotis californicus</i>) (b)	
(2) San Joaquin Pocket Mouse (<i>Perognathus inornatus inornatus</i>) (b)	
(3) Nelson's Antelope Ground Squirrel (<i>Ammospermophilus nelsoni</i>) (b)	
(4) San Joaquin Valley Wood rat (<i>Neotoma fuscipes riparia</i>) (b)	
(5) San Joaquin Kit Fox (<i>Vulpes macrotis mutica</i>) (E)(T)(b)	
Amphibians	
(1) California Tiger Salamander (<i>Ambystoma tigrinum californiense</i>) (b)	
(2) California Red-legged Frog (<i>Rana aurora draytoni</i>) (b)	
Reptiles	
Giant Garter Snake (<i>Thamnophis couchi gigas</i>) (E)(b)	
Invertebrates	
(1) Cierro Aegialian Scarab Beetle (<i>Aigialia concinna</i>) (b)	
(2) San Joaquin Dune Beetle (<i>Coelus gracillis</i>) (a)	
Plants	
(1) Hispid bird's beak (<i>Cordylanthus mollis</i> supsp. <i>hispidus</i>) (b)	
(2) Delta Coyote Thistle (<i>Eryngium racemosum</i>) (b)	
Legend	
(E) Endangered (T) - Threatened (CH) - Critical Habitat	
(a) Category 1: Taxa for which the Fish and Wildlife Service has sufficient biological information to support a proposal to list as endangered or threatened.	
(b) Category 2: Taxa for which existing information indicated may warrant listing, but for which substantial biological information to support a proposed rule is lacking	

**Water**

Future growth in Gustine will mean a greater water demand for urban uses, although with the conversion of agricultural land less water will be utilized for irrigation within the Sphere of Influence. Future development also means more paved surfaces and the reduction of recharge areas.

The City of Gustine will adopt policies that are consistent with the Water Quality Control Plan and will also promote the use of open space to preserve critical recharge areas to replenish groundwater resources.

Flood Control

As residential development occurs the inadequacy of the storm drainage facilities will increase. Current drainage flows toward low lands and in an actual flood could back up to flood the east side of town.

The City should establish its own programs for development and maintenance of drainage facilities in order to accommodate new development. As part of this program Gustine will secure a long-term agreement with CCID or other irrigation districts (if necessary) to accept storm water runoff in an emergency. The City will also prepare a Storm Drain Master Plan with designated drainage zones. In order to implement this, the city will require that new development pay for future amendments or additions to drainage zones, and current acquisition of detention basin sites, construction of pipelines and pump stations, and replacement of old catch basins, inverted siphons, and pump stations. Over and above new development, ongoing maintenance expenses may necessitate increases in user fees.

The City needs to define storm drainage zones to coincide with planning boundaries, negotiate and implement agreements with CCID and, where feasible, establish new detention basins in conjunction with parks.

Air Resources

As growth continues there is a potential for increased air pollutants and the further degradation of air quality. This will be a consideration in the approval and conditioning of new development.

Local implementation of California's Clean Air Act (AB 2595) may result in more restrictive mitigation measures for residential developments built after January 1989. This could include the reduction of fugitive dust during construction activity and the installation of EPA certified fireplace inserts to promote more efficient combustion.

Additionally there may be some new requirements for indirect source emissions (motor vehicles). In order to help achieve net emission reductions in Gustine and countywide transit services, non-motorized systems and local ridesharing services could be improved. (see Circulation Element).

Cultural Resources

As open land develops the potential for damaging or disturbing cultural resources becomes more likely. Disturbance or destruction of cultural resources may result from any type of activity that involves disturbing the earth or removing existing structures.



On-the-ground surveys for archaeological cultural resources are necessary prior to development. Major impacts to some types of archaeological cultural resources include residential development, agriculture (especially field leveling and deep "rip" plowing), highway and levee construction. Disturbance or destruction of cultural resources may result from any type of activity that involves disturbing the earth or removing existing structures. Before development of this type occurs, subsurface tests should be required to prevent the destruction or disturbance of cultural resources. Alluvial deposits have covered many archaeological sites in the Central Valley and these will not necessarily be evident by inspection of the ground surface alone.

Many archaeologists consider all types of archaeological sites to be significant, that is, they have the potential to produce information of value. Therefore all archaeological sites merit recordation, mapping and investigation at a degree sufficient to obtain essential information, especially if a site will be impacted directly or indirectly as a result of a proposed action or development. Assessment of the quality of significance should be made on a case-by-case basis, and not upon an arbitrary point score system or upon some other type of "cookbook" approach.

Historical Sites and Buildings

Historical sites and Buildings will be effected as the downtown commercial area is redeveloped. All historical buildings run the risk of being changed or destroyed if they are not recognized as important and listed on State and Federal registers.

The city believes that it would be appropriate to inventory local historic buildings and sites and selects candidates for the State or National Registers to preserve some of Gustine's history.

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